Taylor Yard Park Development MND

Technical Appendices

Appendix A

Air Quality Calculations

URBEMIS 2002 For Windows 7.4.2

File Name: P:\2003\3J111 Taylor Yard Park MND\technical reports\Air\Taylor.urb
Project Name: Taylor Yard
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2004 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	15.52	134.12	105.28	0.00	132.32	6.44	125.88
TOTALS (lbs/day, mitigated)	14.75	87.75	100.25	0.00	26.51	0.46	26.04

*** 2005 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	15.39	94.31	128.42	0.01	4.53	4.14	0.39
TOTALS (lbs/day, mitigated)	14.76	62.13	123.49	0.01	0.71	0.32	0.39

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	0.08	0.01	0.58	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	4.82	5.42	59.12	0.05	4.23

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	4.90	5.42	59.71	0.05	4.23

URBEMIS 2002 For Windows 7.4.2

File Name: P:\2003\3J111 Taylor Yard Park MND\technical reports\Air\Taylor.urb
Project Name: Taylor Yard
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2004 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	1.15	9.61	7.99	0.00	34.70	0.46	8.28
TOTALS (tpy, mitigated)	1.09	6.28	7.63	0.00	6.93	0.03	1.71

*** 2005 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	1.55	9.17	12.38	0.00	2.73	0.36	0.00
TOTALS (tpy, mitigated)	1.48	6.05	11.93	0.00	0.16	0.02	0.00

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	0.01	0.00	0.05	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	0.87	1.14	10.69	0.01	0.77

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	0.88	1.14	10.75	0.01	0.77

URBEMIS 2002 For Windows 7.4.2

File Name: P:\2003\3J111 Taylor Yard Park MND\technical reports\Air\Taylor.urb
Project Name: Taylor Yard
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2004
Construction Duration: 18
Total Land Use Area to be Developed: 40 acres
Maximum Acreage Disturbed Per Day: 5 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 871200

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2004***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	125.87	-	125.87
Off-Road Diesel	15.32	133.87	100.63	-	6.43	6.43	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.20	0.25	4.65	0.00	0.02	0.01	0.01
Maximum lbs/day	15.52	134.12	105.28	0.00	132.32	6.44	125.88
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	8.75	69.83	62.91	-	3.30	3.30	0.00
Bldg Const Worker Trips	2.71	1.49	31.98	0.00	0.41	0.02	0.39
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	11.46	71.32	94.89	0.00	3.71	3.32	0.39
Max lbs/day all phases	15.52	134.12	105.28	0.00	132.32	6.44	125.88
*** 2005***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	8.75	67.27	64.57	-	3.05	3.05	0.00
Bldg Const Worker Trips	2.48	1.38	29.43	0.00	0.41	0.02	0.39
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.12	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.00	25.08	33.99	-	1.05	1.05	0.00
Asphalt On-Road Diesel	0.03	0.56	0.11	0.01	0.01	0.01	0.00
Asphalt Worker Trips	0.03	0.02	0.32	0.00	0.00	0.00	0.00
Maximum lbs/day	15.39	94.31	128.42	0.01	4.53	4.14	0.39
Max lbs/day all phases	15.39	94.31	128.42	0.01	4.53	4.14	0.39

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '04
Phase 2 Duration: 6 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Other Equipment	190	0.500	8.0
5	Rubber Tired Dozers	250	0.590	8.0
1	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Dec '04
Phase 3 Duration: 12 months
Start Month/Year for SubPhase Building: Dec '04
SubPhase Building Duration: 12 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Cranes	190	0.430	8.0
2	Other Equipment	190	0.500	8.0
1	Pavers	132	0.590	8.0
4	Tractor/Loaders/Backhoes	79	0.465	8.0

SubPhase Architectural Coatings Turned OFF
Start Month/Year for SubPhase Asphalt: Sep '05
SubPhase Asphalt Duration: 3 months
Acres to be Paved: 3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.0
1	Pavers	132	0.590	8.0
1	Rollers	114	0.430	8.0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2004***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	26.03	-	26.03
Off-Road Diesel	14.55	87.50	95.60	-	0.45	0.45	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.20	0.25	4.65	0.00	0.02	0.01	0.01
Maximum lbs/day	14.75	87.75	100.25	0.00	26.51	0.46	26.04
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	8.31	45.64	59.76	-	0.23	0.23	0.00
Bldg Const Worker Trips	2.71	1.49	31.98	0.00	0.41	0.02	0.39
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	11.02	47.13	91.75	0.00	0.64	0.25	0.39
Max lbs/day all phases	14.75	87.75	100.25	0.00	26.51	0.46	26.04
*** 2005***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	8.31	43.97	61.34	-	0.21	0.21	0.00
Bldg Const Worker Trips	2.48	1.38	29.43	0.00	0.41	0.02	0.39
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.12	-	-	-	-	-	-
Asphalt Off-Road Diesel	3.80	16.39	32.29	-	0.07	0.07	0.00
Asphalt On-Road Diesel	0.03	0.37	0.10	0.01	0.00	0.00	0.00
Asphalt Worker Trips	0.03	0.02	0.32	0.00	0.00	0.00	0.00
Maximum lbs/day	14.76	62.13	123.49	0.01	0.71	0.32	0.39
Max lbs/day all phases	14.76	62.13	123.49	0.01	0.71	0.32	0.39

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
Phase 2: Soil Disturbance: Water exposed surfaces - 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 34.0%)
Phase 2: Off-Road Diesel Exhaust: Use aqueous diesel fuel
Percent Reduction(ROG 0.0% NOx 14.0% CO 0.0% SO2 0.0% PM10 63.0%)
Phase 2: Off-Road Diesel Exhaust: Use diesel particulate filter
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 80.0%)
Phase 2: Off-Road Diesel Exhaust: Use lean-NOx catalyst
Percent Reduction(ROG 0.0% NOx 20.0% CO 0.0% SO2 0.0% PM10 0.0%)
Phase 2: Stockpiles: Cover all stock piles with tarps
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
Phase 2: Unpaved Roads: Water all haul roads 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 3.0%)
Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)
Phase 2: Off-Road Diesel Exhaust: Properly Maintain Equipment
Percent Reduction(ROG 5.0% NOx 5.0% CO 5.0% SO2 5.0% PM10 5.0%)
Phase 3: Off-Road Diesel Exhaust: Use aqueous diesel fuel
Percent Reduction(ROG 0.0% NOx 14.0% CO 0.0% SO2 0.0% PM10 63.0%)
Phase 3: Off-Road Diesel Exhaust: Use diesel particulate filter
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 80.0%)
Phase 3: Off-Road Diesel Exhaust: Use lean-NOx catalyst
Percent Reduction(ROG 0.0% NOx 20.0% CO 0.0% SO2 0.0% PM10 0.0%)
Phase 3: Off-Road Diesel Exhaust: Use aqueous diesel fuel
Percent Reduction(ROG 0.0% NOx 14.0% CO 0.0% SO2 0.0% PM10 63.0%)
Phase 3: Off-Road Diesel Exhaust: Use diesel particulate filter
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 80.0%)
Phase 3: Off-Road Diesel Exhaust: Use lean-NOx catalyst
Percent Reduction(ROG 0.0% NOx 20.0% CO 0.0% SO2 0.0% PM10 0.0%)
Phase 3: On-Road Diesel Exhaust: Use aqueous diesel fuel
Percent Reduction(ROG 0.0% NOx 14.0% CO 0.0% SO2 0.0% PM10 63.0%)
Phase 3: On-Road Diesel Exhaust: Use lean-NOx catalyst
Percent Reduction(ROG 0.0% NOx 20.0% CO 0.0% SO2 0.0% PM10 0.0%)
Phase 3: Off-Road Diesel Exhaust: Properly Maintain Equipmnet
Percent Reduction(ROG 5.0% NOx 5.0% CO 5.0% SO2 5.0% PM10 5.0%)
Phase 3: Off-Road Diesel Exhaust: Properly Maintain Equipmnet
Percent Reduction(ROG 5.0% NOx 5.0% CO 5.0% SO2 5.0% PM10 5.0%)
Phase 3: On-Road Diesel Exhaust: Properly Maintain Equipmnet
Percent Reduction(ROG 5.0% NOx 5.0% CO 5.0% SO2 5.0% PM10 5.0%)
Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '04
Phase 2 Duration: 6 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Other Equipment	190	0.500	8.0
5	Rubber Tired Dozers	250	0.590	8.0
1	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Dec '04
Phase 3 Duration: 12 months
Start Month/Year for SubPhase Building: Dec '04

SubPhase Building Duration: 12 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Cranes	190	0.430	8.0
2	Other Equipment	190	0.500	8.0
1	Pavers	132	0.590	8.0
4	Tractor/Loaders/Backhoes	79	0.465	8.0

SubPhase Architectural Coatings Turned OFF
Start Month/Year for SubPhase Asphalt: Sep '05
SubPhase Asphalt Duration: 3 months
Acres to be Paved: 3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.0
1	Pavers	132	0.590	8.0
1	Rollers	114	0.430	8.0

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.00	0.00	0.00	-	0.00
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.08	0.01	0.58	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
TOTALS(lbs/day,unmitigated)	0.08	0.01	0.58	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Community Park	4.82	5.42	59.12	0.05	4.23
TOTAL EMISSIONS (lbs/day)	4.82	5.42	59.12	0.05	4.23

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2004 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Community Park	12.14 trips / acres	40.00	485.60

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	56.10	2.70	96.80	0.50
Light Truck < 3,750 lbs	15.10	4.60	92.70	2.70
Light Truck 3,751- 5,750	15.60	2.60	96.20	1.20
Med Truck 5,751- 8,500	6.90	2.90	94.20	2.90
Lite-Heavy 8,501-10,000	1.00	0.00	80.00	20.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	10.00	20.00	70.00
Heavy-Heavy 33,001-60,000	0.80	0.00	12.50	87.50
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.60	87.50	12.50	0.00
School Bus	0.20	0.00	0.00	100.00
Motor Home	1.30	15.40	76.90	7.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Community Park				5.0	2.5	92.5

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 70
The Diverted Trip % for Blank changed from 10 to 25
The Pass-By Trip % for Blank changed from 0 to 5
The Primary Trip % for Racquetball/health club changed from 50 to 70
The Diverted Trip % for Racquetball/health club changed from 40 to 25
The Pass-By Trip % for Racquetball/health club changed from 10 to 5
The Primary Trip % for General light industry changed from 80 to 70
The Diverted Trip % for General light industry changed from 20 to 25
The Pass-By Trip % for General light industry changed from 0 to 5

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths
Site Grading Fugitive Dust Option changed from Level 1 to Level 2
Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas
has been changed from off to on.
Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly
has been changed from off to on.
Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 2x daily
has been changed from off to on.
Phase 2 mitigation measure Off-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 2 mitigation measure Off-Road Diesel Exhaust: Use diesel particulate filter
has been changed from off to on.
Phase 2 mitigation measure Off-Road Diesel Exhaust: Use lean-NOx catalyst
has been changed from off to on.
Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Water all haul roads 2x daily
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
has been changed from off to on.
Phase 2 mitigation measure Off-Road Diesel Exhaust: Properly Maintain Equipment
has been changed from off to on.
Phase 3 mitigation measure Off-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 3 mitigation measure Off-Road Diesel Exhaust: Use diesel particulate filter
has been changed from off to on.
Phase 3 mitigation measure Off-Road Diesel Exhaust: Use lean-NOx catalyst
has been changed from off to on.
Phase 3 mitigation measure Off-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 3 mitigation measure Off-Road Diesel Exhaust: Use diesel particulate filter
has been changed from off to on.
Phase 3 mitigation measure Off-Road Diesel Exhaust: Use lean-NOx catalyst
has been changed from off to on.
Phase 3 mitigation measure On-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 3 mitigation measure On-Road Diesel Exhaust: Use lean-NOx catalyst
has been changed from off to on.
Phase 3 mitigation measure Off-Road Diesel Exhaust: Properly Maintain Equipmnet
has been changed from off to on.
Phase 3 mitigation measure Off-Road Diesel Exhaust: Properly Maintain Equipmnet
has been changed from off to on.
Phase 3 mitigation measure On-Road Diesel Exhaust: Properly Maintain Equipmnet
has been changed from off to on.

Changes made to the default values for Area

The natural gas option switch changed from on to off.
The wood stove option switch changed from on to off.
The fireplcase option switch changed from on to off.
The consumer products option switch changed from on to off.

Changes made to the default values for Operations

Appendix B

Biological Resources Existing Conditions Report

TAYLOR YARD
BIOLOGICAL RESOURCES
EXISTING CONDITIONS REPORT

Prepared by:

EDAW, Inc.

February 2004

Biotic Resources

Biological resources within Parcel D were compiled based on a site visit, consultation with the Department employees, and a review of existing environmental documentation for the region. Information reviewed included the California Natural Diversity Data Base (CNDDB) (CDFG 2003a), as well as the *Taylor Yard Multiple Objective Feasibility Study*. This subsection describes the plant communities and wildlife present at the Taylor Yard complex and surrounding areas.

Plant Communities

The following descriptions of the vegetation communities within Parcels D and G are based on a site visit made on March 18, 2003, and information provided in the *Taylor Yard Multiple Objective Feasibility Study* and R.F. Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California.* The descriptions about Parcel D pertain to the entire 40-acre parcel. The plant communities present at Parcel D are shown in Figure 1.

Parcel D

Due to past grading and railroad operations within Parcel D, numerous dirt roads crisscross the site, berms and other landform alterations are evident, and areas of extensive soil compaction are present. As a result, nearly all of the vegetation within Parcel D would be considered disturbed habitat, or ruderal. Both of these vegetation communities develop as a result of repeated past disturbances in an area, which alter, and in some cases, eliminate, native plant species. In addition to ruderal and disturbed areas, Parcel D contains areas of mulefat scrub, disturbed riparian woodland, freshwater marsh, and disturbed coastal sage scrub.

Ruderal/Disturbed

Ruderal communities are areas of high disturbance that are dominated by invasive nonnative forbs (herbaceous, nongrass species) that are adapted to a regime of frequent disturbances. Nonnative annual grasses occur often, but contribute less than 50 percent of the entire herbaceous cover. Many of the broad-leaved weeds characteristic of ruderal areas are also common species of nonnative grasslands. Ruderal habitat in Parcel D is dominated by fennel (*Foeniculum vulgare*), mustard (*Hirschfeldia incana*), wild radish (*Raphinus sativus*), tocalote (*Centaurea melitensis*), and sweetclover (*Melilotus* sp.). Additional species common within the ruderal

vegetation areas in Parcel D include fountain grass (*Pennisetum setaceum*), ripgut grass (*Bromus diandrus*), slender wild oats (*Avena barbata*), tree tobacco (*Nicotiana glauca*), sunflower (*Helianthus annus*), Russian thistle (*Salsola tragus*), castor bean (*Ricinus communis*), and pampass grass (*Cortaderia selloana*). A few remnant native scrub species are also scattered in the ruderal vegetation areas on-site including black sage (*Salvia mellifera*) and coyote brush (*Baccharis pilularis* var. *consanguinea*).

Where roads cover Parcel D, and other areas where past or on-going extensive off-road vehicle use is apparent, these areas may be characterized as disturbed. Disturbed habitat is any land that has been permanently altered by human activities including grading, vehicle damage, and repeated clearing. Disturbed land is typically characterized by more than 50 percent bare ground and an absence of remnant native vegetation. Furthermore, the previous disturbance is usually severe enough to eliminate future recovery of the area without active restoration. The vegetation in areas mapped as Dispturbed is sparse and includes scattered nonnative grasses, fennel, and castor bean.

Mulefat Scrub

Mulefat scrub is generally considered an early seral vegetation community and often develops in areas subject to frequent flooding. Site disturbance in an area with fairly coarse substrate situated at a moderate depth above the water table may also be factors conducive to supporting mulefat scrub. Parcel D is not subject to frequent flooding; however, it is characterized by berms and mounded areas formed by past grading, and hence many shallow slopes, low-lying areas, and localized drainages are present within the site. Within Parcel D, mulefat (*Bacchris salicifolia*) is scattered throughout most of the site. However, in several locations along the lower portion of slopes this species forms a dense cover where areas of mulefat scrub warranted mapping (Figure 1).

Disturbed Riparian Woodland

Riparian communities are typically situated along stream courses and adjacent banks, and along urban drainages. Most riparian species are restricted to areas of a high water table and require moist, bare mineral soils for germination and establishment, much like the conditions following periodic flooding (Holland 1986). The low-lying areas and localized drainages present within the site are artifacts of the past activities and remediation work on the property, which have created isolated mesic conditions appropriate for supporting tree species such as willows (e.g., arroyo

willow, *Salix lasiolepis*; and black willow, *Salix goodingii*), Fremont cottonwood (*Populus fremontii*), and Mexican elderberry (*Sambucus mexicana*), many of which exceed 25 feet in height. Due to the disturbed conditions at the site and the native species composition, these areas were mapped as disturbed riparian woodland. Other species occurring within these areas include tree tobacco, tamarisk (*Tamarix* sp.), mulefat, toyon (*Heteromeles arbutifolia*), and laurel sumac (*Malosma laurina*). No wetland delineations were conducted as part of the reconnaissance survey. Most of the plant species noted above are considered wetland species; however, due to the isolation of the mesic areas from the L.A. River, or from urban drainages that flow into the river, the areas mapped as disturbed riparian woodland are not considered federal and state jurisdictional wetlands, and thus not protected by the California Department of Fish and Game (CDFG) and U.S. Army Corps of Engineers (ACOE) wetland regulations. Under CEQA, however, the habitat provided by these vegetation communities would be considered sensitive.

Freshwater Marsh

Freshwater marsh is dominated by perennial, emergent monocots (flowering plants that have one seed leaf), which grow in standing fresh water. During the reconnaissance survey, two areas of ponded water were noted in the southern portion of Parcel D within an area where past vehicle activity appears to have been severe, and soil compaction is evident (Figure 1). Because the reconnaissance survey was conducted within a few days of heavy precipitation, ponded water was observed on site; however, no streams or other drainages are knows to occur on the site. The two ponds occur within a higher portion of the site; therefore, it is presumed that the soil compaction has contributed to the seasonal ponding in this area. The center of these two areas was open water at the time of the survey; however, the outer portions support cattails (*Typha* sp.), sand-spurry (*Spergularia* sp.), Australian saltbush (*Atriplex semibaccata*), mulefat, and scattered saplings of black willow, and arroyo willow. Many of these plant species are considered wetland species; however, due to the disturbed nature of the site, the isolated location of these areas, and the lack of any connection to streams or natural water courses, it is unlikely that these areas would be considered federal and state jurisdictional wetlands.

Disturbed Coastal Sage Scrub

Coastal sage scrub is one of the major shrub-dominated (scrub) communities within California. This community occurs on xeric sites (i.e., sites that receive only a small amount of moisture) with shallow soils. Sage scrub species are typically drought deciduous plants with shallow root systems. Both of these adaptations allow for the occurrence of sage scrub species on xeric sites.

Within Parcel D, only one remnant patch of coastal sage scrub was observed on the site in the southwestern corner of the property, along a west-facing slope. Native scrub species observed in this area include California sage brush (*Artemisia californica*), laurel sumac, black sage, coyote bush, and mulefat. Coastal sage scrub is considered a sensitive habitat by CDFG (Holland 1986) because this community supports an extremely high number of sensitive species. Due to the disturbed and isolated condition of the coastal sage scrub on the site, sensitive species are not expected to occur in this patch of native scrub.

Sensitive Plants

Sensitive plant species are those that are candidates, proposed, or listed as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) or the CDFG, and those plants that are considered sensitive species by the California Native Plant Society (CNPS) (CDFG 2003b, CNPS 2001). There are several plant species known for the area around the Taylor Yard complex that are considered to be sensitive; however, all are thought to be locally extirpated due to extensive development in the region. No sensitive plants have previously been detected within the park site, and none were observed during the recent reconnaissance survey. None are expected to occur within Parcels D or G. Information about past observations of the sensitive plant species within the vicinity of the park, based on the CNPS database, is included in Table 1 below.

Table 1. Sensitive Plant Species Known to Occur within the Vicinity of Taylor Yard Parcel D

Species	Habit and Habitat	Potential for Occurrence	USFWS	CDFG	CNPS
Braunton's milk-vetch *Astragalus brauntonii*	Perennial herb; blooms March-July. Associated with chaparral, coastal scrub, valley and foothill grasslands, closed-cone coniferous forest, and in carbonate soils of recent burned or disturbed areas	Not expected due to lack of suitable habitat. The small amount of coastal sage scrub within Parcel D is highly disturbed. Possibly locally extirpated per records in the CNDDB.	FE	--	1B 3-3-3
Coastal dunes milk-vetch *Astragalus tener* var. *titi*	Annual herb; blooms March-May. Associated with coastal bluff scrub (sandy), coastal dunes, and coastal prairie.	Not expected due to lack of suitable habitat. Possibly extirpated per records in the CNDDB.	FE	SE	1B 3-3-3
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	Annual herb; blooms April-October. Associated with coastal bluff scrub, and alkaline coastal scrub.	Not expected due to lack of suitable habitat. Mapped in 1902 southeast of Hollywood; thought	--	--	1B 3-2-2

Species	Habit and Habitat	Potential for Occurrence	USFWS	CDFG	CNPS
		to be extirpated from Los Angeles county.			
Plummer's mariposa lily *Calochortus plummerae*	Perennial herb; blooms May-July. Associated with in granitic substrates of chaparral, coastal sage scrub, cismontane woodland, lower montane coniferous forest, and foothill grasslands.	Not expected due to lack of suitable habitat. The small amount of coastal sage scrub within Parcel D is highly disturbed. Mapped in 1901, 1906, and 1913, in west Hollywood, west of Pasadena, and in Pasadena, respectively. Possibly locally extirpated.	FSC	--	1B 2-2-3
Santa Barbara morning-glory *Calystegia sepium* ssp. *bindhamiae*	Perennial herb; blooms April-May. Associated with marshes and swamps.	Not expected. The small areas of freshwater marsh on Parcel D are highly disturbed. Mapped in 1899 near Cienega; presumed extinct.	--	--	1A
Many-stemmed dudleya *Dudleya multicaulis*	Perennial herb; blooms April-July. Found in clay soils of coastal scrub, chaparral, and valley and foothill grasslands.	Not expected. The small amount of coastal sage scrub and grassland within Parcel D is highly disturbed. Mapped in the vicinity of Hollywood Reservoir in 1905 and 1925; possibly extirpated.	--	--	1B 1-2-3
Los Angeles Sunflower *Helianthus nuttallii* ssp. *parishii*	Perennial herb; blooms August-October. Associated with coastal salt and freshwater marshes and swamps.	Not expected. Last seen in 1937; presumed extinct.	--	--	1A
Orcutt's linanthus *Linanthus orcuttii*	Annual herb; blooms May-June. Associated with chaparral, lower montane coniferous forest, pinyon and juniper woodland/openings.	Not expected due to lack of suitable habitat within Taylor Yard. Mapped in general area of Pasadena in 1925; presumed extant.	--	--	1B 2-1-2
Prostrate navarretia *Navarretia prostrata*	Annual herb; blooms April-July. Associated with coastal scrub, valley and foothill grassland (alkaline), vernal pools/mesic areas.	Not expected. The small amount of coastal sage scrub within Parcel D is highly disturbed. Local populations probably extirpated per CNDDB records.	FSC	--	1B 2-3-3
Parish's gooseberry *Ribes divaricatum* var. *parishii*	Shrub; blooms February-April. Associated with riparian woodland at elevations between approximately 200-330 feet.	Not expected. The small amount of riparian woodland within Parcel D is highly disturbed. Possibly extinct in area per CNDDB records.	--	--	1B 3-3-3

Species	Habit and Habitat	Potential for Occurrence	USFWS	CDFG	CNPS

USFWS: FE = Federally Endangered, FT = Federally Threatened, FSC = Federal Species of Concern.

CDFG: SE = State Endangered, ST = State Threatened, SSC = State Species of Concern, SR = State Rare

CNPS: 1A = California Native Plant Society List 1A (Plants presumed extinct in California)

1B = California Native Plant Society List 1B (rare, threatened, or endangered in California and elsewhere)

2 = California Native Plant Society List 2 (rare, threatened, or endangered in California, but more common elsewhere)

3 = California Native Plant Society List 3 (considered, but more information needed)

CNPS R-E-D Code:

R-Rarity

1 = Rare, but in sufficient numbers, and of wide enough distribution that potential for extinction is low.

2 = Distributed in a limited number of occurrences.

3 = Distributed in one to several highly restricted occurrences, or present in such small numbers that reports are seldom.

E-Endangerment

1 = Not endangered.

2 = Endangered in a portion of its range.

3 = Endangered throughout its range.

D-Distribution

1 = More or less widespread outside California.

2 = Rare outside California.

3 = Endemic to California.

Exotic Plant Species

Exotic plant species are those plants that arrived in an area through human actions. Most nonnative species are not invasive and do not have adverse effects on native plant communities. However, exotic plants are considered "invasive weeds" when they colonize natural areas and dominate or displace natural communities. Some potential impacts resulting from exotic plant infestation include (1) alteration of ecosystem processes, such as nutrient cycling, erosion, and fire frequency; (2) suppression of native plant recruitment and growth; and (3) reduction of wildlife resources, such as food, cover, and nesting habitat. Exotic plants that are considered invasive weeds often have several characteristics that enable them to successfully compete with native plants by rapidly becoming established and precluding the growth of the native species. Habitat conditions, in many cases, are favored by repeated disturbance.

Both Parcels D and G are dominated by nonnative plant species. A few particularly invasive species noted in the vegetation descriptions above that occur at the site include pampass grass (*Cortaderia selloana*), castor bean (*Ricinus communis*), Brazilian pepper tree (*Schinus terebinthifolius*), fennel (*Foeniculum vulgare*), and tamarisk (*Tamarix* sp.). Only on-going management plans can attempt to control current infestations and ensure that future invasions are minimized.

Animals

Although the vegetation communities found on the Parcel D site are relatively degraded, there is sufficient structural diversity to provide habitat for a variety of animals. A handful of sensitive,

threatened and endangered species, as determined by the USFWS and/or the CDFG, are known from the region, but are not expected to breed on-site. The following section describes an overview of general wildlife and associated habitats that occur within and adjacent to Parcels D and G.

Aquatic Life

Aquatic life consists of the fauna that occur within the ephemeral waters of the drainages and impoundments throughout the site. No fish species have been documented on Parcels D and G and due to the transitory nature of the aquatic habitat on-site, no fish species are expected to occur at this time. However, the rolling topography of Parcel D supports seasonally ponded areas that support California toad (*Bufo boreas halophilus*) tadpoles, which is the aquatic phase of the species.

Amphibians

Since Parcel D supports the aquatic phase of the California toad, it is presumed that the transitional areas at the interface between the ponded water and the riparian and upland habitats support adult and metamorphic phases of the species. Additionally, a variety of other relatively common amphibians, including the California newt (*Taricha tarosa*), Pacific treefrog (*Pseudacris regilla*), and California treefrog (*Pseudacris cadaverina*), have a low potential to occur on Parcel D based on the habitat conditions of the site. Amphibians are typically associated with mesic areas at the edge of ponds, along streams, or under leaf litter and other objects where moisture is present. Within the Parcel D, these conditions are associated with the riparian and freshwater marsh habitats that occur on Parcel D.

Reptiles

No reptile species have been documented to occur on site, although suitable habitat exists on Parcels D and G for common species such as the western fence lizard (*Sceloporus occidentalis*), southern alligator lizard (*Gerrhonotus multicarinatus*), and the side-blotched lizard (*Uta stansburiana*). Both the western fence lizard and the southern alligator lizard are relatively well-adapted to disturbance and urban areas and often prefer to inhabit disturbed and ruderal habitats, rock and concrete piles, discarded boards, and trash heaps; therefore, they have a moderate

potential to occur on both Parcels D and G. These species as well as the side-blotched lizard may also inhabit the disturbed coastal sage scrub community on Parcel D.

Birds

The vegetation communities, topography, hydrology, and geology of the Parcel D, and adjacent off-site features such as the L.A. River, combine to provide a variety of habitats for several resident and migratory bird species within the site. The riparian vegetation, including mulefat scrub, disturbed riparian woodland, freshwater marsh, and the pond/aquatic habitat attract resident and migratory birds by providing valuable resources, particularly for foraging and protective cover. Bird species associated with the riparian habitats within Parcel D include red-winged blackbird (*Agelaius phoeniceus*), mallard (*Anas playtyrhynchos*), northern rough-winged swallow (*Stelgidopteryx serripennis*), and common moorhen (*Fulica americana*). The disturbed coastal sage scrub and ruderal habitats within Parcel D support disturbance and urban-adapted species such as the horned lark (*Eremophila alpestris*), mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), mourning dove (*Zenaida macroura*), and house finch (*Carpodacus mexicanus*).

Mammals

Development in California has destroyed a great deal of natural habitat, limiting animals to pockets of land in which they can thrive, particularly in the greater Los Angeles metropolitan area. Large mammals, such as the nonnative red fox (*Vulpes vulpes*), the native gray fox (*Urocyon cinereoargenteus*), coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), bobcat (*Felis rufus*), and mountain lion (*Felis concolor*) require large tracts of contiguous native open space in order to maintain viable populations over the long-term. Parcel D is relatively isolated from other areas of open space in terms of habitat for large mammals; therefore, these species would not be expected on-site. Furthermore, only small mammals would be expected to occur within the park site. California ground squirrel (*Spermophilus beecheyi*) and domestic dog (*Canis familiaris*) have been documented within both Parcels D and G. Habitats also exist on-site that have the potential to support mice (including *Peromyscus* spp. and *Reithrodontomys* sp.) and other small mammals. Mammal species on-site would be expected to occur throughout all vegetation communities within Parcel D.

Wildlife Movement Corridors and Habitat Linkages

Development in California has destroyed a great deal of natural habitat, limiting animals to pockets of land in which they can thrive, particularly in the greater Los Angeles area. Loss of native vegetation has resulted in the isolation of habitats to the point where wildlife movement has been constrained or eliminated, and habitat linkages severed.

A wildlife corridor can be defined as a linear landscape feature of sufficient width and buffer to allow animal movement between two patches of comparatively undisturbed habitat, or between a patch of habitat and some vital resources. Regional corridors are defined as those linking two or more large areas of natural open space and local corridors are defined as those allowing resident animals to access critical resources (food, cover, and water) in a smaller area that might otherwise be isolated by urban development.

Habitat linkages can be defined as large areas of natural open space that provide connectivity to regional biological resources. These linkages are not narrow corridors through which wildlife species must pass in order to access critical resources. Instead, habitat linkages are wide enough to allow relatively free movement of wildlife species along multiple paths between resources.

Parcel D is relatively small and isolated from large areas of native open space; therefore, it currently does not serve as a functioning wildlife habitat linkage. However, the proximity of the site to the L.A. River works synergistically with the small pockets of native vegetation within Parcel D to help attract avian wildlife from throughout the region by providing protective cover, water, and forage for a variety of species, such as red-winged blackbird, northern rough-winged swallow, and mallard as they travel up and down the river valley. In its current biologically degraded state, however, the unit adds minimal value to the L.A. River wildlife movement corridor.

In terms of regional wildlife movement corridors, Parcel D has the potential to play a significant role in maintaining a high-quality avian wildlife movement corridor between the L.A. River and other pockets of natural open space in the region. Parcels D and G's proximity to the river could allow the park to act as an extension of the wildlife habitat along the river, providing migrant birds a place to stop before continuing through the region. Parcel D is also centrally located between relatively large islands of open space and has the potential to provide avian connectivity between Griffith Park to the northwest, Silver Lake Reservoir to the west, Elysian Park to the

south, and Elyria Canyon Park and Ernest E. Debs Park to the east. Parcel D is approximately 4,000 feet away from both Elysian Park and Elyria Canyon Park, 13,000 feet from Silver Lake Reservoir, and 20,000 feet from both Griffith Park and Ernest E. Debs Park.

Sensitive Animals

Sensitive wildlife are those animal species, which are candidates, proposed, or listed as threatened or endangered by the USFWS or the CDFG, and those animals that are considered species of concern or are listed as protected or fully protected by the state (CDFG 2003c). Additionally, raptors protected under the federal Bald Eagle Protection Act are also considered sensitive species. The USFWS had maintained "Category 2" (C2) and "Category 3" (C3) species candidate lists, which had the similar function as the state lists for species of concern. However, USFWS has since discontinued the recognition of that term and has dropped the C2 and C3 candidate designations in 1995. CDFG has designated all former C2 and C3 species as "federal species of concern." This is a state designation and does not confer any federal protection or status, therefore it is not considered in this document. Although no sensitive species have been documented on site, there is one sensitive reptile species, and ten sensitive bird species known to occur along the lower L.A. River (CCC 2002). All of these species, and their potential for occurrence at the park, are presented in Table 2.

Table 2. Sensitive Animal Species Known from the Lower L.A. River or within the Region

Species	Habitat	Potential for Occurrence	CDFG	USFWS
Reptiles				
San Diego horned lizard *Phrynosoma coronatum blainvillei*	Frequents a variety of habitats from sage scrub and chaparral to coniferous and broadleaf woodlands; often found on sandy or friable soils with open scrub	Not expected to occur on-site or in adjacent areas due to lack of suitable habitat (sandy, friable soil) and preferred prey items (harvester ants).	SSC	--
Birds				
Least bittern *Ixobrychus exilis hesperis*	Fresh and brackish water marshes, usually near open water sources	Low potential to occur in freshwater marsh vegetation within Parcel D, due to the restricted nature of suitable	SSC	--

Species	Habitat	Potential for Occurrence	CDFG	USFWS
		nesting habitat within Parcel D.		
Northern harrier *Circus cyaneus*	Breeds in marshes and grasslands and forages in grasslands, agricultural fields, wetlands, and open coastal sage scrub	Not expected to breed within the sparse freshwater marsh habitat on Parcel D, but has a moderate potential to occur as a migrant.	SSC	--
Cooper's hawk *Accipiter cooperii*	Nests primarily in oak woodlands but occasionally in willows or eucalyptus	Low potential to nest within the riparian woodland vegetation within on Parcel D, due to the disturbed nature of the habitat.	SSC	--
Least Bell's vireo *Vireo bellii pusillus*	Summer resident of low riparian growth in the vicinity of water or in dry river bottoms. Nests are placed along the margins of bushes, usually *Salix*, *Baccharis*, or *Prosopis*	Low potential to nest within the riparian woodland vegetation on Parcel D, due to the disturbed and isolated nature of the habitat.	SE	FE
Coastal cactus wren *Campylorhynchus brunneicapillus*	Found only in coastal sage scrub with extensive stands of tall prickly pear or cholla cacti	Not expected to occur within Parcel D. Suitable cactus habitat does not exist within the park.	SSC	--
Coastal California gnatcatcher *Polioptila californica californica*	Coastal sage scrub habitats, typically on gentle slopes	Not expected to occur within Parcel D, due to the highly disturbed and isolated nature of the coastal sage scrub vegetation within Parcel D.	SSC	FT
Yellow warbler *Dendroica petechia brewsteri*	Breeding restricted to riparian woodlands	Low potential to nest in the disturbed riparian woodland on Parcel D, due to the disturbed and isolated nature of the habitat.	SSC	--
Yellow-breasted chat *Icteria virens*	Breeding is confined to riparian woodlands in the coastal lowlands	Low potential to nest in the disturbed riparian woodland on Parcel D, due to the disturbed and isolated nature of the habitat.	SSC	--
Tri-colored blackbird *Agelaius tricolor*	Inhabits freshwater marsh habitat, usually in cattails or reeds	Low potential to nest within the freshwater marsh vegetation on Parcel D, due to the restricted nature of suitable nesting habitat within the unit.	SSC	--

USFWS: FE=Federally Endangered, FT=Federally Threatened.
CDFG: SE=State Endangered, ST=State Threatened, SSC=State Species of Concern.

Only two of the sensitive species listed in Table 2 have been documented relatively close to Parcel D. Observations of the San Diego horned lizard (*Phrynosoma coronatum blainvillei*) and the coastal California gnatcatcher (*Polioptila californica californica*) are documented in the CNDDB (CDFG 2003a). The horned lizard is considered a California Species of Concern, and the gnatcatcher is considered a California Species of Concern, and a federally listed threatened

species. One San Diego horned lizard specimen was collected in Monterey Park, approximately 1 mile southeast of California State University, Los Angeles. An estimated three pairs of coastal California gnatcatchers were documented in the CNDDB in the Baldwin Hills, in the vicinity of Culver City. Based on the relatively disturbed and isolated nature of Parcel D, these species are not expected to occur on-site.

Exotic Species

Exotic wildlife species documented within Parcel D include the European starling and domestic dog. The presence of the European starling population within Parcel D results in an increase in the competition for resources on the native bird populations. However, the presence of domestic dogs presents a greater concern to resource management since it can prey directly on native wildlife species as well as degrade native habitats within unit.

Ecology

Except for the L.A. River to the west of Parcel G, Parcel D abuts areas that have been developed. As is the case for much of Los Angeles, the areas surrounding the site have been urbanized, although there are small pockets of native habitats dotting the region. Despite the dense development surrounding the site, there is an opportunity to restore important biological resource functions and values within Parcel D and, by extension, to the region by enhancing the existing biological resources on-site. The effective implementation of native habitat restoration or creation would provide refugia for plant and animal species, and enhance avian movement corridors for better connectivity to other areas of open space in the region.

REFERENCES

California Department of Fish and Game (CDFG).

2003a. *California Natural Diversity Data Base. RareFind 2* Computer Data Base. Prepared by the Natural Heritage Division of the California Department of Fish and Game.

2003b. *Special Vascular Plants, Bryophytes, and Lichens List. Biannual publication, Mimeo. Natural Diversity Database.* January. 150 pp.

2003c. *Special Animals.* Wildlife and Habitat Data Analysis Branch. Natural Diversity Database. January. 45 pp.

California Native Plant Society (CNPS).

2001. Inv*entory of Rare and Endangered Plants of California* (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA. x + 388 pp.

California State Coastal Conservancy

1998 *Taylor Yard Flood Detention Basin Feasibility Study.* October 22.

2002 *Taylor Yard Multiple Objective Feasibility Study.* Final Report. June.

Gumprecht, Blake

1995 *51 Miles of Concrete: The Exploitation and Transformation of the Los Angeles River.* Master's Thesis, Department of Geography, California State University, Los Angeles.

1999 *The Los Angeles River: It's Life, Death, and Possible Rebirth.* The Johns Hopkins University Press.

Los Angeles County Department of Public Works and Friends of the Los Angeles River

1993 *Multi-use Study on the Los Angeles River at Taylor Yard.*

Los Angeles County Department of Public Works, Los Angeles County Department of Parks and Recreation, and National Parks Service, Rivers, Trails, and Conservation Assistance Program.

1996 *Los Angeles River Master Plan.* June.

Tyrzyna, Ted

2002 *California's Urban Protected Areas: Progress despite daunting pressures.* California Institute of Public Affairs (CIPA). January 1.

Warren, Claude N

1968 Cultural Traditions and Ecological Adaptation on the Southern California Coast. In Archaic Prehistory in the Western United States, edited by Cynthia Irwin-Williams. Eastern New Mexico University Contributions in Anthropology 1(3):1- 14.

U.S. Environmental Protection Agency (USEPA)

2000 Principles for the Ecological Restoration of Aquatic Resources. EPA841-F-00-003. *Office of Water* (4501F), Washington DC.

Appendix C

Cultural Resources Technical Report

Taylor Yard Preliminary Cultural Evaluation

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Date: 02 February 2004

Introduction

In December 2001, the California Department of Parks and Recreation [DPR] acquired forty acres of land within Taylor Yard. Part of a larger Southern Pacific Railroad freight switchyard and maintenance facility, the railroad had closed the facility in 1985. In a unique arrangement, DPR will lease some 20 acres of State parkland to the City of Los Angeles. While the former will seek provide habitat restoration, nature trails, and picnic areas, the latter will develop and dedicate its land for recreational sports activities. However, in a unique arrangement, both will jointly plan, develop, fund, and operate their respective segments in a manner compatible to each.

Project Location

Taylor Yard is located along the eastern boundary of the Los Angeles River, between Fletcher Drive to the north and Figueroa Street to the south, with San Fernando Road forming its eastern boundary. The yard lies within a five-mile section of the river valley known as the "Glendale Narrows." An important historic transportation and communication corridor, it links the southeast portion of the San Fernando Valley, between the Elysian Hills and Santa Monica Mountains to the west and the Repetto Hills to the east, to the Los Angeles Coastal Plain.

The study site's consists of a 29.585 and 10.836-acre section of the original rail yard now designated as Parcel Sections D-1 and D-2, respectively. The site's legal description is as follows:

> Parcel D, as shown on a Certificate of Compliance for Lot-Line Adjustment, recorded September 19, 1997 as Instrument No. 97-1451455, Official Records, more particularly described as follows.
>
> That portion of that certain 2790.16 acre tract of land allotted to Jesse D. Hunter in Rancho San Rafael, in the City of Los Angeles, County of Los Angeles, State of California, entered in the District Court of the 17th Judicial Court Case No. 121 of the State of California, in the County of Los Angeles, filed in Book "B" page 671, et seq. of Judgments, as described in the Deed to Southern Pacific Railroad Company, Recorded August 11, 1873, in Book 25, page 548 of Deeds, in the Office of the County Recorder of Said County and those portions of Lots 2 and 7 of the Southern Pacific Classification Yard Tract, in said City, County and State, as per Map recorded in Book 147, pages 22 to 26, inclusive, of Maps, in the Office of said County Recorder, described as a whole as follows:
>
> Commencing at a point in the southeasterly line of the Allesandro Parkway (150.00 feet wide), as shown and dedicated on the Map of Tract No. 14215, as per Map recorded in Book 307, page 8 of said maps, distant south 53° 51' 09" west, along said southeasterly line, 81.11 feet its northeasterly terminus. Said point being in a curve concave southwesterly and having a radius of 2359.59 feet, a radial line of said curve to said point bears north 61° 55' 59" East; thence southeasterly along said curve, through a central angle of 6° 03' 02", an arc distance of 249.18 feet; thence south 22° 00' 59" east, tangent to said curve, 472.40 feet to the beginning of a tangent curve concave northeasterly and having a radius of 2239.59 feet, thence southeasterly along said curve, through a central angle of 15° 01' 44", an arc distance of 587.45 feet; thence south 37° 02' 43" east, tangent to said curve, 1136.23 feet to the beginning of a tangent curve concave southwesterly and having a radius of 2359.59 feet; thence southeasterly along said curve, through a central angle of 19° 31' 55", an arc

distance of 804.37 feet; thence south 17° 30' 48" east, tangent to said curve, 1198.72 feet to the beginning of a tangent curve concave northeasterly and having a radius of 2239.59 feet; thence southeasterly along said curve, through a central angle of 15° 55' 26", and arc distance of 622.44 feet to the true point of beginning in a line extending northeasterly and having a bearing of North 54° 58' 22' East, thence southeasterly, continuing along said curve, through a central of 1° 40' 03", an arc distance of 65.18 feet; thence south 36° 06' 17" east, tangent to said curve, 1205.32 feet to the beginning of a tangent curve concave northeasterly and having a radius of 2239.59 feet; thence southeasterly along said curve, through a central angle of 14° 44' 52", an arc distance of 576.46 feet to the southwesterly prolongation of the northwesterly line of that certain parcel of land described as Parcel C in that certain covenant and agreement to hold property as one parcel, recorded on June 17, 1991, as Instrument No. 91-903824 of Official Records, in the Office of said County Recorder; thence North 54° 58' 22" east, along said southwesterly prolongation of said northwesterly line 889.05 feet to the northeasterly line of the Land described in said deed recorded in Book 25, Page 548 of Deeds, said northeasterly line being on said Map of the Southern Pacific Classification Yard Tract; thence north 35° 01' 38" west, along said northeasterly line, 1840.50 feet to said line having a bearing of North 54° 58' 22" east; thence south 54° 58' 22" west, 94.37 feet to the true point of beginning (PSOMAS 2004:1).

Historically, Parcel D was the site of Taylor Yard's "Humpyard Treatment Area," a 20-acre section in the central and southwest portions of the 19-acre Taylor Yard Sale Parcel. Here, between 1925 and ca. 1973, small switch locomotives shoved strings of freight cars to the top of an artificially created eight-foot-high hillock. Under the direction of a switch foreman, the cars were uncoupled and allowed to roll down the opposite side to prearranged tracks. Originally manned by brakemen, later automated external pneumatic brakes slowed the cars' descent where they were switched into various tracks. The area, known as "classification bowl," was where the cars were assembled into consists before being hauled out of the yard (Mullaly and Petty 2002:124-125; and Scott 1994).

Geological Profile

Located on the Los Angels River channel and floodplain, Taylor Yard lies on layers of interbedded and braided alluvial deposits ranging in size from coarse sand to very fine silt and clay-sized particles. This was evident during the trenching of section of the former rail raid (exact location unknown) during June 1991. The excavation, to remove contaminated soil, also revealed a naturally deposited formation with an irregular upper surface covered by a varied thickness of engineered fill (Ito 1991:1).

Previous Studies

An information Center records search was conducted on May 28, 2002 for the subject property. The results of that inquiry were negative. No prehistoric archaeological sites are recorded in the project area or within a ½ mile radius of the property boundaries. Also, no historic archaeological sites have been identified within a ½ mile radius of the project area.

While no archeological sites are recorded within a ½ mile radius of the Taylor Yard property, it is possible that historic features or trash related to the historic use by the railroad might be still buried, although this is unlikely (in terms of intact features).

Nine previous archeological studies have been conducted within a ½ mile radius of the property and most have yielded negative results. Six of these studies overlap the current boundaries of this parcel (Parcel D or the Humpyard).

Previous studies include Robert White and David Van Horn (1989) study of the "Phase I Cultural Resources study of the 18.4 –acre proposed ETNA Commercial Plaza Site, City of Los Angeles", Robert J. Wlodarski study (1991) of a "Phase I Archaeological Study for Eight Areas proposed for the New Los Angles Police Training Academy, and Driver Training Facility, City of Los Angeles, Los Angeles County, California.", The anonymous study of the "Draft Environmental Impact Report for the Police Bond Program Police Driver Training Facility" (1992), Peak And Associates report (1992) of the Consolidated Report: Cultural Resource Studies for the Proposed Pacific Pipeline Project, Robert J. Wlodarski's study (196) of "a Phase I Archaeological Study for the Telacu Point Located at 3100 Fletcher Drive, City and County of Los Angeles, California., Robert J. Wlodarski (1996) also conducted a study of "a Phase I Archaeological Study for the Telacu Point Project Located at 3100 Fletcher Drive, City and County of Los Angeles, California, Philomene C. Smith (2000) conducted a study "Negative Archaeological Survey Report:07-LA-2KP22.5/36.7-170-21370k", Barbara Sylvia produced a "Negative Archaeological Survey Report: 07-LA-134-9.8/10.9-174-21780k, paving protection at the Taylor Yard Overhead", and Compass Rose study (2000) Phase I Cultural Resource Investigation at Lennar Taylor Yard." Most of these reports list no sites in the project area. The reports with sites are outside the boundaries of the current project.

In 1992, the American Institute of Architects Los Angeles Chapter Urban Design Committee produced a briefing book on Taylor Yards. It also compiled a summary of Environmental Impacts. In this report, they listed under Archaeology that no significant cultural resources were directly encountered during field investigations (AIA 1992:10).

There were several known Tongva or Gabrielino ethonographic villages in the general area of Taylor Yard. Two of the closest villages were likely *Maawnga* on the Rancho de los Felis (Reid 1852). Just south of this was an area described in the Portola expedition account by Father Juan Crespi as a very fertile well watered region (see below). Another village in the downtown area was the community of *Yaanga* near the current Civic Center (McCawley 1996:55-57).

According to McCawley the village of *Geveronga* might also have been in this area (McCawley 1996: 57). The Mission Register of San Gabriel lists several (31) converts from this village between 1788-1809. The exact location of these villages is still uncertain.

Given the location of the Taylor yard parcel in the Los Angeles river floodplain, it would not have been a primary location for an aboriginal village or a camp. Due to the remedial action (IC, 1994) on the sale parcel D, it is unlikely that any cultural feature survived and still exists with any integrity. Almost 18 inches of soil was treated and then at least 5 feet of clean fill was added to the parcel for environmental concerns. Any cultural material will be at least 7 feet deep and no significant prehistoric or historic deposits are known on the parcel.

Historic Background

Because of its geographic position, the Taylor Yard site is uniquely connected to the early history of Los Angeles. It was the traditional home of the Tongva Indians, who made first contact with the Spanish explorers of the 1769 Portolá expedition. On August 2nd the expedition camped along the dry east river bank reportedly near the present-day Broadway Bridge. Father Crespi, the expedition's diarist, named the river and valley

which it bisected "*El Rio y Valle de Nuestra Senora la Reina de Los Angeles de la Porciuncula,*" shortened later to just Los Angeles. In 1781, the Pueblo of Los Angeles was established just downstream, on the river's west bank. San Fernando Road along Parcel D was a major access route along El Camino Real north through present day Glendale to the Cahuenga Pass. A historically important pass through the Santa Monica Mountains, it linked the pueblo to Mission San Fernando Rey de España as well as the coastal missions, presidios, and ranchos beyond. It also connected Los Angeles to the higher Tejón Pass, an important pass through the Tehachapi Mountain and the gateway to the San Joaquin Valley and the Central Valley beyond (Coalition 2004; EDAW 2004:23; and Pitt 1997:70, 135 and 494).

The road through the Glendale Narrows continued to serve as a vital transportation and communications corridor during the Mexican Rancho era. Part of the 36,000-acre Rancho San Raphael, it was associated with one of the first Spanish land grants in California. Encompassing most of present-day Glendale, the ranch was a grant from Governor Pedro Fages to José María Verdugo. A former corporal, Verdugo had served at Mission San Gabriel prior to his retirement from the colonial army. Although he had received his grant on October 20, 1784, Verdugo and his family did not live on the ranch until 1790. Besides running cattle and horses, he planted and grew wine grapes, vegetables, oranges, pomegranates, figs, peaches, apples, and wheat in the fertile soil. There were also mountain lions, grizzly bears, deer, coyote, and quail to hunt. After his death in 1831, the land was passed on to Verdugo's children, Julio and Catalina. However, due to financial hardships, they had to relinquish their claims in 1861. There are no reports or indications of the existence of any buildings or structures associated with the Verdugo family's operation of the ranch within the study parcel. In the ten years following the Verdugo family sale of their ranch, it was sold and subdivided into smaller ranch and farm properties (Coalition 2004; and Pitt 1997:526).

One historic activity that can be traced to the property during the Verdugo ownership is that of the Butterfield Overland Mail line. The United States Post Office had granted the line's founder, John Butterfield, a contract to run mail along the 2,700-mile line in 1858. Besides carrying the mail, the line's horse-drawn coaches offered the first direct two-way through passenger service from St. Louis, Missouri to California. Traveling by way of El Paso, Texas, and Tucson, Arizona, or south from San Francisco through the Central Valley, coaches stopped near the plaza in Los Angeles. One of six stage stops in the Greater Los Angeles area. The others included El Monte, Cahuenga, Mission San Fernando, and Fort Tejón. Although it was discontinued at the outbreak of the Civil War, it had already helped to end the state's isolation from the rest of the United States. Taken over by the Wells-Fargo Express Company after the war, the route continued to link Los Angeles with the rest of California and points east. Except for the present alignment of San Fernando Road, there is no reported evidence of stagecoach-related activities in the study area (Beck 1974: 51-52; Conkling 1947 Vol. 2:248, 251-252 and Map Supplement; Pitt 1997:68 and Overland 1958).

Hard on the heels of the stagecoach was the coming of the transcontinental railroad through the Glendale Narrows in 1876. That year the Southern Pacific Railroad began construction of its main line into Los Angles from San Francisco via the Glendale Narrows. A subsidiary of the transcontinental Central Pacific Railroad, its president, Collis P. Huntington, reportedly attempted to bribe city officials into granting the SP the exclusive use of the Los Angeles riverbed for its tracks. While this and other schemes failed, the railroad was able to acquire a considerable amount of public lands for rail yards gratis (Fickewirth 1992:145; and Pitt 1997:478-479.

Taylor Yard was one of a number of SP rail yards that sprung up along the Los Angeles River north of its original 1874 passenger and freight depot and train yard at Alameda

and Commercial streets. It originated in 1888 as a freight storage yard adjunct to its River (Cornfield) Station. Laid out along a sandy river terrace between the main line along San Fernando Road and the river's eastern bank, it could hold as many as 225 freight cars. It was expanded further between 1907 and 1911 some two-and-a-half miles to the south. By 1913 the yard's receiving capacity had expanded to ten tracks totaling 21,000 feet spread across both sides of the main line. In addition, the Pacific Fruit Company, a jointly owned Southern Pacific-Union Pacific subsidiary, erected a 50,000 ton a day ice plant between the storage tracks and the river. The following year the Pacific Fruit Express established its Los Angeles shops nearby (Coalition 2004; and Mullaly and Petty 2002:123 and 321).

After a near disastrous flood in 1914, when water flowing into the Pacific Ocean equaled that of the Colorado River, SP began a major over hall to what was then referred to as the "New Classification Yard." The nation's surging post-war economy had brought about an increase in rail traffic into and out of the city. An earthen levee along the river's east bank was built up, and 90,000 yards of earth were brought in to level the ground between the Pacific Fruit Facility and the main line. An additional 47,000 feet of track were laid, along with a vehicular subway, a 60-carload capacity icing platform, and a new two-story office building. In 1925 SP shifted supervision of its entire Los Angeles freight handling operations from River Station to what it now called Taylor Yard (Mullaly and Petty 2002:123-124; and Pitt 1997:303).

The history behind the freight yard's new moniker has an interesting history. In 1908 SP installed a switch and laid a spur line just north of Elm Street parallel to San Fernando Road's eastern alignment. The spur tracks serviced the new feed mill of the Taylor Milling Corporation. The corporation's owner, J. Hartley Taylor, was an influential businessman, whose career began in the area. Taylor had come to Los Angeles with his family from their native Ohio in 1887. Settling in the narrows, the family established a little hog farm along the river's east bank, where they also grew vegetables and had milk cows. Whatever surplus they had they sold at a roadside stand along the trail that eventually became San Fernando Road. The stand evolved into a grocery, meat, and produce store. The Taylors soon added a mill and grain storage facilities next to the store where local farmers could bring their grain to have it ground and mixed into feedstuffs, breakfast cereal, and flour (Nootbaar 2000:1).

In order to supplement his income, Taylor would drive his two-horse team into Los Angeles, where he would tie them up. He then boarded the last run of the Sherman Railway, after which he changed into a conductor's uniform, and served as such until the end of the line at the beach. Here he would unroll his blanket and sleep in one of the cars until the morning run back to Los Angeles. After changing back into his overalls, he picked up his team and headed over to the hotels and restaurants along Main and Spring streets. He then proceeded to load up the wagon with garbage and offal and hauled it back home to feed the hogs (Ibid.).

Taylor's business interests expanded exponentially during World War I, as a result of having to meet a high demand for vital foodstuffs for the war effort. Completed in 1929 at the end of the Taylor Spur, his company's new all-concrete Taylor Mill Grain Silo was the second-highest structure in Los Angeles at the time, second only to City Hall. Over the next fifteen years, Taylor, whose company purchased several grain and feed mills at Stockton, Oakland, and Visalia, became the West Coast's largest commercial feed supplier. Taylor's business empire included a number of diverse interests. For example, the Western Industrial Engineering Company manufactured milling and industrial machinery; the Bonquet [sic] Laboratories manufactured food supplements; while Runnymede Farms became the world's largest supplier of chicken eggs. He was also the founder of the White Mountain Salt Company. Located in the Owens Valley, its now-

historic 17-mile tramway hauled mineral salt down the White Mountains to the rail station at Keeler. His brother-in-law, well-known brick maker Elmer Simons, influenced his decision to found the Van Nuys Bick & Tile Company (Ibid:2-4).

Taylor Yard's historical significance was a number of modern railroad methods in Southern California. It introduced the "hump-based" classification system, where small switch locomotives shoved strings of freight cars to the top of an artificially created eight-foot-high hillock (located originally just south of Parcel D). Under the direction of a switch foreman manned in a number of control towers along the tracks, the cars were uncoupled and allowed to roll down the opposite side to prearranged tracks. Manned by car riders, who used the brake wheels to slow their descent, the cars rolled into a "classification bowl," where they were assembled into consists. Between fifteen and twenty car riders were employed on any given shift. The yardmen of the Taylor "train factory" were disassembling and reassembling as many as sixty freight trains a day. Operating 24-hours a day, the yard, especially around the assembly tracks, was a cacophony of steam locomotives, rumbling freight cars, and crashing knuckle couplers (Mullaly and Petty 2002:124-125).

In addition to switching cars, other activities occurring at Parcel D were light repairs such as cleaning cars and oiling friction bearings. However, because the eight "rip" (repair in place) car repair tracks were narrowly spaced at 13-foot centers, the yard was an extremely dangerous place to work as rolling freight cars lumbered down the hump with only the car men on board to slow them down before coupling into the cars ahead (Ibid.:122 and 125).

Although the onset of the Great Depression in 1930 had a deep impact on southland rail freight traffic, SP continued to expand and improve its Taylor Yard facility. In 1931, it allowed the rival Union Pacific Railroad to lay double tracks along the river's east bank. This allowed the need for west-bound freight trains entering or leaving Los Angeles from having to cross the river. That same year SP built a new roundhouse and divisional shop facility on empty land at Taylor Yard between the Pacific Fruit Express grounds and the river bed. The last large roundhouse built by SP, it provided servicing of freight locomotives of the San Joaquin and Los Angeles divisions. After the flood, the city began an extensive channelization of the river. A panoramic view of Taylor Yard taken during the 1950s shows the entire length of the river's east bank covered with concrete, with culverts opening out onto the river bed (Ibid.:128 and 184-185).

Because Taylor Yard's site was above the river's natural flood plain through the narrows, and protected by the fore-mentioned levee, it did not experience a great deal of damage during the great flood of 1938. The worst flood in LA's history to date; it crippled SP's operations out of the city for days (Ibid.:138).

The next period of change to occur at Taylor Yard occurred in the 1949. Due to the expansion of local defense, aerospace, and other industries, Los Angeles had become the Pacific Coast's leading manufacturing center. SP spent $2.5 million to upgrade Taylor Yard. The transition from steam to diesel-electric motive power brought about the expansion of the yard's roundhouse and engine repair facilities to maintain the newer, larger locomotives. Improvements in Parcel D included tall pole-mounted floodlights and speakers, and cement towers along the newly automated hump. Located some 215 feet north of its original site, the hump now featured pneumatically controlled retarders that pinched the cars' steel wheels as they rolled down the hump sans brakemen. Expanding to 25 receiving tracks, as many as 2,700 cars passing over the hump were combined into forty different trains in a typical 24-hour period (Ibid.:175-176, 179 and 221).

The completion of a modern freight classification yard at West Colton in 1973 greatly reduced Taylor Yard's importance as the "epicenter" of SP's switching operations in the southland. The majority of the Southland's freight now passed through the Palmdale-Colton cut-of to the West Colton Yard. While Taylor Yard was still an important engine and car repair facility, its switching days were over. For the next twelve years, SP began to slowly phase out these operations, finally closing the yard in 1985. This invariably had a detrimental social impact: the loss of several hundred residents in the surrounding communities to loose their jobs (Ibid.:237, 239 and 248-249).

SP divided Taylor Yard into two sections: the "Active Yard," where some rail maintenance activities still occurred, and the "Sale Yard," which was divided into several individual parcels for sale. Parcel D was one of these. SP worked with the California Department of Toxic Substance Control (DTSC), under the direction of the California Environmental Protection Agency, to perform an extensive analysis of the Sale Yard for contaminated soils in order to develop an action plan for remediation (Coalition 2004).

After tests revealed the presence of contaminated soil and groundwater, DTSC declared the Taylor Yard Complex, including parcels A-F, as a brownfield. Parcel D contained amounts of lead in the soil that posed a potential chronic and sub-chronic, non-carcinogenic hazard to public health, as well as a threat to the ground water. The suspected source of the lead was from historic rail car operations. As the freight cars rumbled up and over the hump, and especially when they "knuckled" into the cars parked ahead of them in the collection bowl, lead-based paint chips invariably flaked off onto the ground. As outlined in two reports: *Final Remedial Action Plan, Taylor Yard Parcel* and the *Remedial Design for the Hump Yard*, DTSC entered an Enforceable Agreement (Docket #HSA 89-90-006) with SP to clean up the Sale Yard Parcels (CEPA 1993: 2-3; EDAW 2004: 8-9; IC 1994:Introduction).

Work to remediate Parcel D began in October 1992 and was completed in August 1993. Because the Los Angeles County Transportation Commission (LACTC) had purchased a portion of Parcel D prior to implementation of the remediation plan, two remedial action objectives were chosen: in situ and ex situ treatment. The LACTC section received the latter treatment, by which 16,000 tons of affected soil were excavated, treated, and returned. On the 14-acre unsold parcel section, 34,000 cubic yards of contaminated soil was subjected to in situ chemical fixation. Shallow soil tilling and mixing equipment capable of delivering liquid reagents and water was used to mix the soil to a depth of 18 inches. The soil tilling device was similar to an earthworks scraper, but with the tiller assembly situated with the pan was normally located. To ensure optimal mixing, the operator could control the device's mixing speeds, which would be adjusted to deal with specific soil characteristics. The machine overlapped the treated areas at all times to ensure that the fixation process be continuous. A vibratory sheepsfoot machine was then used to compact the treated soil. The result was a near homogenous mix of soil and reagents that, after curing, hardened into a solid, cementaceous horizontal monolith. Clean fill dirt was then compacted over the latter to reduce the potential for human contact with the treated, lead-affected soil. SP placed more than five feet of additional fill dirt in the Hump Yard to prepare the property for sale. The only recorded evidence of potentially historic rail yard-related material that surfaced during the in situ soil treatment were a number of air pipes that may have serviced the yard switches and retarders. To avoid the existence of buried pipes from damaging the soil cultivators, extensive "grubbing" was done in six different directions at each discovery site. All of the tracks and a number of small utilitarian structures had already been removed after the hump yard was retired (IC 1994:Introduction, 1-1, 3-1,3-2, 3-12 to 3-15. and 4-3).

In July and again in October 1996 TerraNext, an environmental monitoring company, informed DTSC that no further remedial activity was necessary for the Hump Yard. On January 30, 1998, DTSC's report, the Explanation of Significant Differences for Union Pacific Railroad Company Taylor Yard—Sale Parcel Site, Hump Yard, stated that Parcel D was cleared for development for residential or unrestricted use. However, the issue of groundwater contamination beneath the Sale Parcels is still being analyzed (EDAW 2004: 9; and Mazowiecki 1996:2).

Developmental plans for the former rail yard parcels had called for their conversion into several light industrial or service facilities. The first to be completed was a Metrolink Maintenance Facility built on 29 acres at the southernmost end of the Sale Yard ca. 1991-92. Because the project moved forward without public review, the surrounding community was deeply outraged. They filed a lawsuit that resulted in the Los Angeles County Transportation Authority agreeing to fund several mitigations to the project. The first was a large mural on the building's side; the second was plantings along San Fernando Road; the third was a public art project along the facility's new access road. An agreement was also reached by which the agency would fund the construction of a proposed pedestrian bridge over the river (Ibid.).

A consortium of community residents, leaders, elected officials, as well as environmental groups, land owners, and other concerned groups and organizations, demand a master planning process for Taylor Yard that would take their input into consideration. Their efforts, including team area recommendations, were documented in December 1992 is the report: *Taylor Yard, A Catalyst for Community Change.* The following year, the Los Angeles Metropolitan Transit Authority sponsored the *Taylor Yard Transit Development Study.* Conducted by the HNTB Corporation, in association with Economic Research Associates & Barrio Planners, Inc., their *Land Use Analysis Workbook* of May 22, 1993 was developed to summarize information from the Army Corps of Engineers' Reconnaissance Study and a Taylor Yard Urban Design Workshop in an effort to solicit more community input and feedback. A subsequent team of planners, architects and other land use professionals then summarized and published the comments and concerns in several volumes and translated them into master plan designs. The study proposed different mixed-use proposals based on community input, calling for public open space/recreation areas ranging from 65-189 acres. The remainder of the site would be balanced between industrial, commercial and residential uses. The rest of the site would be used for recreational and flood detention (Ibid.).

In 1997, Federal Express constructed a new facility on 8 acres adjacent to Parcel D. The following year, Nelson Nameplate expanded its local facility on roughly nine acres at the northwest tip of the Sale Yard, and the LA Media Tech Center began preparations to build a 49-acre business park at the Sale Yard's northern end. While the community welcomed the projects for the projected jobs they might bring, others still voiced environmental concerns. For example, in 1999, Lennar Partners, a Florida based developer proposed erecting an industrial and retail development for Parcel D. Residents were concerned that the proposed development, which would be close to residential neighborhoods and schools, would pose numerous environmental impacts to the community. While some voiced their concern that the Mitigated Negative Declaration (MND) was seriously flawed, the City approved the project and the City Council approved $4.37 Million in public subsidy funds to offset the developer's costs (Ibid.).

The passage of Prop 12 in 2000, the statewide parks bond, provided a potential catalyst for the "greening" of at least one segment of Taylor Yard. In June 2000, the Coalition for a State Park at Taylor Yard urged Governor Davis and the State Legislature to approve $45 Million to acquire lands at Taylor Yard for a State Park. The first new State Park in Los Angeles in a generation, it would be the lynchpin the development of the proposed Los Angeles River Parkway. In January 2001, the Coalition, however, was forced to file suit against Lennar, the Union Pacific Railroad and the City of Los Angeles, to challenge the City's approval. Among several issues, the Coalition suit cited clear violations of CEQA in the areas of air quality, water quality and traffic. On July 20, 2001, the Los Angeles Superior Court ruled in favor of the petitioners. The project was sent back to the City of Los Angeles and required Lennar to prepare a full Environmental Impact Report. Instead, Lennar chose to sell the property to California State Parks. The California Department of Parks and Recreation acquired the 40 acres of Parcel D at Taylor Yard in December 2001 Ibid.).

Conclusions

No known aboriginal archeological sites are in the project boundaries. While the parcel certainly has had a rich history, few historical features have survived intact. In fact, except for a solitary signal gantry along San Fernando Road, no intact historical features exist above ground on the parcel today. Though it is possible, probably no intact below ground historic features have survived demolition and the soil remediation process. The integrity of the historic railroad resources at Taylor Yard have been significantly diminished to the point of non-existence.

Bibliography

AIA 1992 — American Institute of Architects. *Briefing Book. Taylor Yard Study Area Planning and Urban Design Workshop.*

Beck 1974 — Beck, Warren A. and Ynez D. Haase. *Historical Atlas of California.* Norman: University of Oklahoma Press.

CEPA 1993 — California Environmental Protection Agency-Department of Toxic Substances Control. *Southern Pacific Taylor Yard-Active and Sale Parcel. Fact Sheet Number 5*, May.

Coalition 2004 — Coalition for a State Park at Taylor Yard. *Taylor Yard History.* Http://www.tayloryard.org/history.html.

Conkling 1947 — Conkling, Roscoe Platt and Margaret B. Conklin. *The Butterfield Overland Mail, 1857-1869: Its Organization and Operation over the Southern Route to 1861; Subsequently over the Central Route to 1866; and under Wells, Fargo and Company in 1869.* 3 Vols. Glendale: Arthur H. Clark Company.

Duke 2004 — Duke, Donald. *Mt Washington: Its Hotel and Incline Railway.* Http://www.erha.org/washington.htm. In *The Electric Railway Historical Association of Southern California: a Guide to the Electric Traction Heritage of the Los Angeles Region.* Http://www.erha.org/index.html.

EDAW 2004 — EDAW. *Taylor Yard State Park Draft General Plan.* Unpublished Manuscript.

Fickewirth 1992 — Fickewirth, Alvin A. *California Railroads: an Encyclopedia of Cable Car, Common Carrier, Horsecar, Industrial, Interurban, Logging, Monorail, Motor Road, Short Lines, Streetcar, Switching and Terminal Railroads in California (1851-1992).* San Marino: Golden West Books.

IC 1994 — Industrial Compliance. *Final Hump Yard Remedial Action Closure Report. Southern Pacific Transportation Company. Taylor Yard Sale Parcel. 2850 Kerr Street. Los Angeles, California*, 14 October.

Ito 1991 — Ito, Luis H. *Review of Workplan and Support Services Branch.* Memorandum to Larry L. Peterson, et al. California Department of Health Services, 19 June.

Mazowiecki 1996 — Mazowiecki, Charles R. Letter to Javier Hinojosa, California Department of Toxic Substances Control, Region 3, 14 October.

McCawley, William
1996 *The First Angelinos*, The Gabrielino Indians of Los Angeles. Malki Museum Press and Ballena Press. Banning Ca.

Mullaly and Petty
2002 Mullaly, Larry and Bruce Petty
The Southern Pacific in Los Angeles, 1873-1996. San Marino: Golden West Books and the Los Angeles Railroad Heritage Foundation.

Nootbaar
2000 Nootbaar, H.V.
Letter to Dace Taube, Curator, Regional History Center. University of Southern California. 26 October. On File at the Southern Service Center. California Department of Parks and Recreation.

Overland
1958 Overland Mail Centennials, California Committee
Trans-Continental Stage Lines out of California in 1858. Http://www.lib.berkeley.edu/EART/maps/ca-1858.gif.

Pitt
1997 Pitt, Leonard and Dale
Los Angeles A to Z: an Encyclopedia of the City and County. Berkeley and Los Angeles: University of California Press.

PSOMAS
2004 PSOMAS
Record of Survey in the City of Los Angeles, County of Los Angeles, State of California. Being a Survey of Parcel D, as Shown on a Certificate of Compliance for Lot-Line Adjustment. Recorded September 19, 1997 as Instrument No. 97-1461456, Official Records, in the Office of the County Recorder of Said County.

Reid, Hugo
1852 Los Angeles County Indians. Los Angeles Star 1(41)-2 (11) 21 February-24 July. (Reprinted, The Indians of Los Angeles County: Hugo Reid's Letters of 1852, edited and annotated by Robert F. Heizer. Southwest Museum, Los Angles, 1968)

Scott
1994 Scott, H.M. & Associates
Humpyard Treatment Area. Sketch Accompanying a Legal Description at Taylor Yard in the City of Los Angeles, California, 6 June.

SDS
2001 Survey and Drafting Services
Boundary Survey. Portion of Parcel G, Taylor Yard. City of Los Angeles, California, 10 October.

Taylor Yard
2004 Taylor Yard, Glendale, California
Views of Taylor Yard Taken during the Early 1960s. Http://www.geocities.com/Heartland/Ranch/1916/taylor.html

TerraNext
1996 TerraNext
Quarterly Summary Report: Southern Pacific Transportation Company. Remedial Investigation/Feasibility Study/Remedial Action Plan. Taylor Yard, Los Angeles, California. Reporting Period: April 1-June 30, 1996.

Thienes 2001 — Thienes Engineering, Inc. *Exhibit B. Existing Parcel Description of Parcel D, as Shown on a Certificate of Compliance for Lot Line Adjustment. Recorded September 19, 1997 as Instrument No. 97-1461456, Official Records, in the Office of the County Recorder of Said County.* 15 February.

Appendix D

Traffic Study

DRAFT REPORT

Taylor Yard Park Development
Traffic Impact Study
City of Los Angeles

Prepared for

EDAW

Prepared by

Meyer, Mohaddes Associates
707 Wilshire Boulevard, Suite 4810
Los Angeles, CA 90017

February 2004

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INTRODUCTION

This report summarizes the results of a traffic impact study that was undertaken for the proposed Taylor Yard Park Development located in the City of Los Angeles. The report summarizes the methodology, findings and conclusions of the traffic impact analysis. A total of four (4) key intersections in the vicinity of the project site were analyzed. The traffic study assesses the effects of the additional trips expected to be generated by the proposed park development. The traffic impact analysis also takes into account other traffic growth due to specific development projects in the surrounding area and overall ambient growth in background traffic.

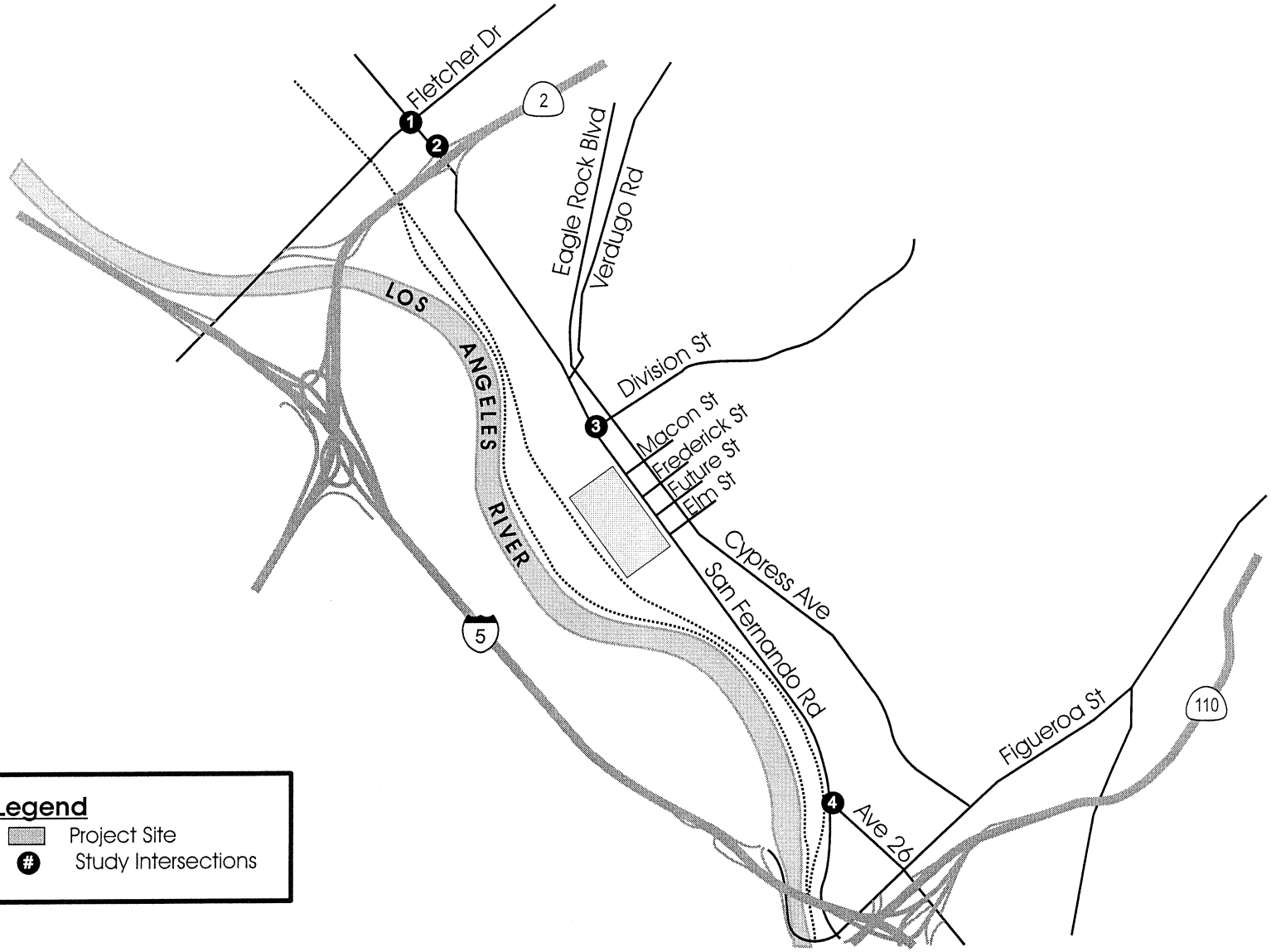
Project Description

The proposed Taylor Yard Park project involves the development of a 40-acre park at Parcel D of the Taylor Yard site. Parcel D is located on the west side of San Fernando Road generally between Macon and Elm Streets. The site is adjacent to the Union Pacific Railroad and the Los Angeles River. As planned, the City of Los Angeles would lease 20 acres from the California Department of Parks and Recreation for active park uses. These activities would include soccer, baseball, basketball, football, and tennis. The remaining 20 acres, which would be developed and operated by the State, would include passive recreational features, such as picnic areas, outdoor amphitheater, trails, and habitat restoration. **Figure 1** shows the location of the proposed project site in relation to the surrounding street system while **Figure 2** illustrates the conceptual site plan.

In conjunction with City of Los Angeles Department of Transportation (LADOT) staff, a total of four (4) intersections we identified and are analyzed in the traffic study for weekend midday peak hour conditions. It should be noted that given the nature of the land use being proposed, it was determined that the project would have minimal effect on the standard weekday morning and evening peak hours of street traffic. Therefore, the traffic analysis focuses on the weekend midday peak period when the activities associated with the proposed Taylor Yard Park project are expected to be at their highest. The locations of the four study intersections are:

- San Fernando Road and Fletcher Drive
- San Fernando Road and SR-2 Southbound On/Off Ramps
- San Fernando Road and Division Street
- San Fernando Road and Avenue 26

The locations of the analyzed locations are illustrated on **Figure 1.**



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Traffic Impact Study

FIGURE 1
Study Area

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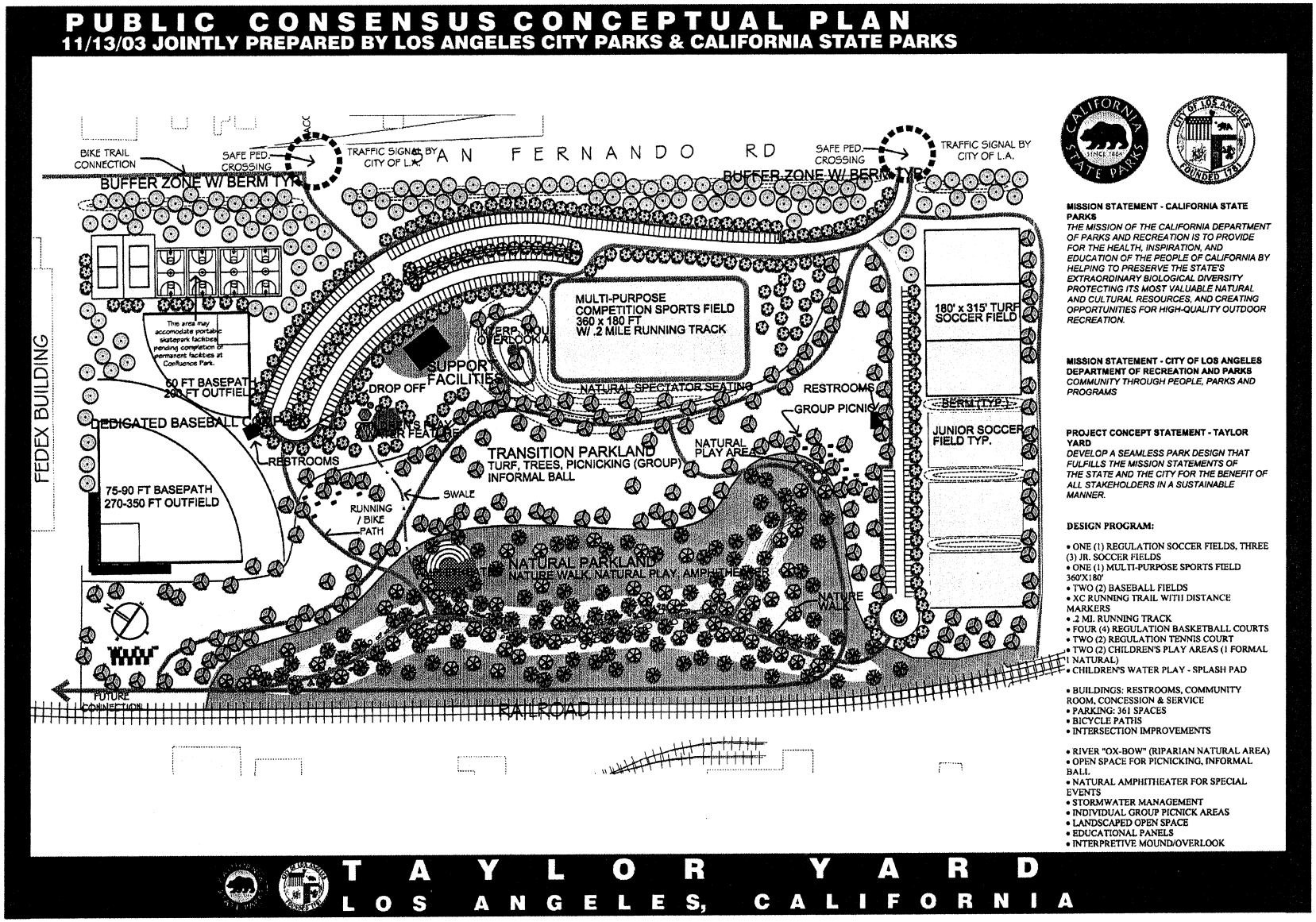

MISSION STATEMENT - CALIFORNIA STATE PARKS

THE MISSION OF THE CALIFORNIA DEPARTMENT OF PARKS AND RECREATION IS TO PROVIDE FOR THE HEALTH, INSPIRATION, AND EDUCATION OF THE PEOPLE OF CALIFORNIA BY HELPING TO PRESERVE THE STATE'S EXTRAORDINARY BIOLOGICAL DIVERSITY PROTECTING ITS MOST VALUABLE NATURAL AND CULTURAL RESOURCES, AND CREATING OPPORTUNITIES FOR HIGH-QUALITY OUTDOOR RECREATION.

MISSION STATEMENT - CITY OF LOS ANGELES DEPARTMENT OF RECREATION AND PARKS

COMMUNITY THROUGH PEOPLE, PARKS AND PROGRAMS

PROJECT CONCEPT STATEMENT - TAYLOR YARD

DEVELOP A SEAMLESS PARK DESIGN THAT FULFILLS THE MISSION STATEMENTS OF THE STATE AND THE CITY FOR THE BENEFIT OF ALL STAKEHOLDERS IN A SUSTAINABLE MANNER.

DESIGN PROGRAM:

- ONE (1) REGULATION SOCCER FIELDS, THREE (3) JR. SOCCER FIELDS
- ONE (1) MULTI-PURPOSE SPORTS FIELD 360'X180'
- TWO (2) BASEBALL FIELDS
- XC RUNNING TRAIL WITH DISTANCE MARKERS
- .2 MI. RUNNING TRACK
- FOUR (4) REGULATION BASKETBALL COURTS
- TWO (2) REGULATION TENNIS COURT
- TWO (2) CHILDREN'S PLAY AREAS (1 FORMAL / NATURAL)
- CHILDREN'S WATER PLAY - SPLASH PAD
- BUILDINGS: RESTROOMS, COMMUNITY ROOM, CONCESSION & SERVICE
- PARKING: 361 SPACES
- BICYCLE PATHS
- INTERSECTION IMPROVEMENTS
- RIVER "OX-BOW" (RIPARIAN NATURAL AREA)
- OPEN SPACE FOR PICNICKING, INFORMAL BALL
- NATURAL AMPHITHEATER FOR SPECIAL EVENTS
- STORMWATER MANAGEMENT
- INDIVIDUAL GROUP PICNICK AREAS
- LANDSCAPED OPEN SPACE
- EDUCATIONAL PANELS
- INTERPRETIVE MOUND/OVERLOOK

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Traffic Impact Study

FIGURE 2
Conceptual Site Plan

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EXISTING CONDITIONS

New weekend midday peak period turning movement traffic counts were conducted at the four analyzed intersections in January 2004. The traffic counts were conducted during a four-hour period from 10:00 AM to 2:00 PM to ensure that the midday peak of street traffic was captured. The traffic impact analysis was based on the highest single hour of traffic (during the midday peak period) at each location. The counts show that the weekend midday traffic peaks around 12:00 noon in the area.

Figure 3 show the existing weekend midday peak hour traffic volumes at the four study intersections. A field inventory was conducted of all study intersection locations. The inventory included review of intersection geometric layout, traffic control, lane configuration, posted speed limits, transit service, land use and parking. This information is required for the subsequent traffic impact analysis. **Figure 4** illustrates the existing intersection geometry (lane configurations) for the four analyzed intersections.

Existing Roadway Conditions

Regional access to the Taylor Yard Site is provided by the Golden State Freeway (I-5), Glendale Freeway (SR-2), and Pasadena Freeway (SR-110). The Golden State Freeway is located approximately one-half mile west of the project site. The I-5 provides north-south regional access to site. Within the study area, ramps with the I-5 occur at Fletcher Avenue, Stadium Way, and Riverside Drive. The Glendale Freeway is located approximately one mile north of the project with ramps located at Fletcher Drive. The Pasadena Freeway is located approximately one mile south of the project site. Within the study area, ramps with the SR-110 are provided at Figueroa Street and Avenue 26.

There are also local roadways which provide access to the project site. The following provides a brief description of these roadways within the study area.

San Fernando Road – San Fernando Road is major highway which travels in a northwest-southwest direction directly adjacent to the project site. Within the study area, San Fernando Road provides a total of four travel lanes divided by striped double yellow median. Left-turn lanes are provided at several of the lager intersections including Fletcher Drive, SR-2 ramps, Cazador Street and Avenue 26. The land uses along San Fernando Road are primarily industrial with some commercial-retail uses.

Fletcher Drive – Fletcher Drive is a northeast-southwest street located to the north of the project site. Fletcher Drive provides a total of four travel lanes divided by a striped double yellow median. The existing land uses along Fletcher Drive are mostly commercial and industrial.

Eagle Rock Boulevard – Eagle Rock Boulevard is a north-south facility located north of the project providing two travel lanes divided by a continuous two-way left-turn lane. Near the project site (at Verdugo Road), Eagle Rock Boulevard turns into Cypress Avenue and continues southerly to Figueroa Street. A mix of commercial, industrial, and residential uses are found on Eagle Rock Boulevard.

Verdugo Road – Verdugo Road is a north-south street which parallels Eagle Rock Boulevard. A total of two travel lanes are provided and similar to Eagle Rock Boulevard, a mix of commercial, industrial, and residential land uses front Verdugo Road. The portion of Verdugo Road between San Fernando Road and Avenue 30 is one-way northbound.

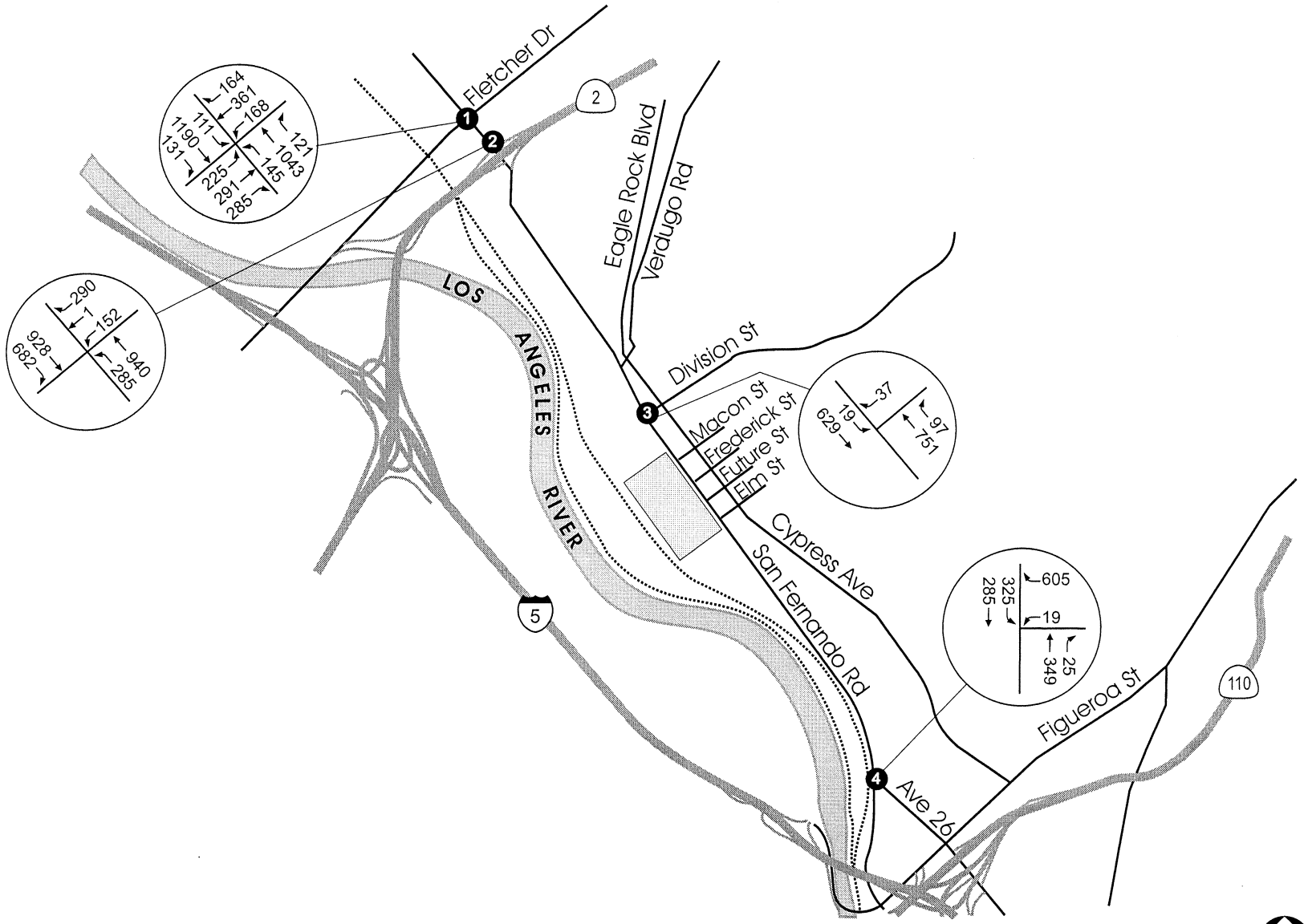

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FIGURE 3

Taylor Yard Park Development - City of Los Angeles
Traffic Impact Study

Existing Weekend Midday Peak Hour Traffic Volumes

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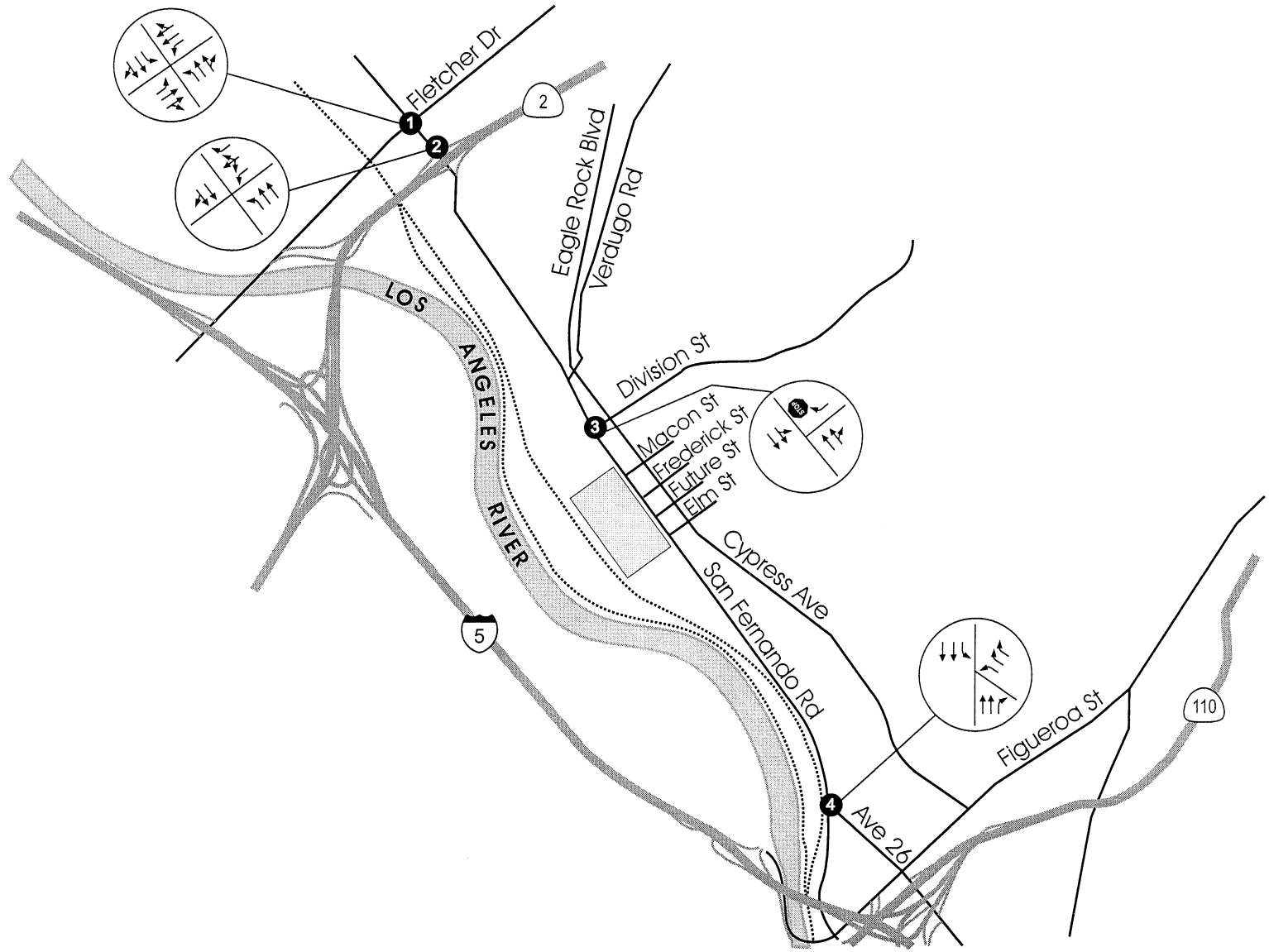

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FIGURE 4

Existing Intersection Lane Configurations

Taylor Yard Park Development - City of Los Angeles
Traffic Impact Study

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Cypress Avenue – Cypress Avenue is a northwest-southwest street which travels parallel to and north of San Fernando Road. A total of four travel lanes and a two-way left-turn lane are provided along Cypress Avenue. The land use along Cypress Avenue consists of commercial, industrial, and residential uses.

Division Street – Division Street is a north-south street located just north of the project site. Division Street provides two travel lanes and serves primarily residential uses north of Cypress Avenue. The southern terminus of Division Street occurs at the intersection with San Fernando Road where only southbound right-turns are permitted.

Avenue 26 – Avenue 26 is an east-west street generally providing two lanes in each direction. Avenue 26 merges into San Fernando Road south of the project site. The land uses, which front Avenue 26 in the study area are primarily commercial and industrial.

Figueroa Street – Figueroa Street is a north-south facility located to south of the project site. Figueroa Street provides between two and three lanes (in each direction) throughout the study area. The land uses that front Figueroa Street are primarily commercial and industrial uses.

Existing Transit Operations

The Metropolitan Transit Authority (MTA) operates several bus lines within the study area. In addition, there is a Metrolink Station located in Glendale approximately two miles north of the project site. The MTA Metro Red Line subway also services the study area. Description of transit service follows:

Metropolitan Transit Authority

MTA Lines 84 and 85 – These routes operate between downtown Los Angeles and the City of Glendale. Within the study area, these lines operate along Cypress Avenue, Eagle Rock Boulevard (Line 84), and Verdugo Road (Line 85). These lines provide service on the weekdays, weekends and holidays.

MTA Lines 90 and 91 – Lines 90 and 91 operate between downtown Los Angeles and the Sylmar area of the San Fernando Valley. Within the study area these routes travel along San Fernando Road, providing a stop at Division Street. These lines provide service on the weekdays, weekends and holidays.

MTA Lines 94 and 394 – Within the study area, these routes travel along San Fernando Road providing service between downtown Los Angeles and the Olive View Medical Center in Sylmar. Line 394 is a limited stop route providing service only during the weekday morning and evening peak periods. Line 94 provides service everyday.

Traffic Operations Analysis Methodology

Traffic operating conditions in the vicinity of the project were analyzed using intersection capacity-based methodology known as the Circular 212 "Critical Movement Analysis" (CMA) method for the signalized locations. At the stop-controlled intersection, the Highway Capacity Manual (HCM) methodology for unsignalized locations was utilized to calculate the average delay and corresponding level of service.

The efficiency of traffic operations at a location is measured in terms of Level of Service (LOS). Level of service is a description of traffic performance at intersections. The level of service concept is a measure of average operating conditions at intersections during an hour. It is based on a volume-to-capacity (V/C) ratio for signalized locations and delay (in seconds) for stop-controlled intersections. Levels range from A to F with A representing excellent (free-flow) conditions and F representing extreme congestion. The CMA methodology compares the amount of traffic an intersection is able to process (the capacity) to the

level of traffic during the peak hours (volume). A volume-to-capacity (V/C) ratio is calculated which determines the level of service. The HCM method for stop-controlled intersections calculates the average delay, in seconds, per vehicle for each approach and for the intersection as a whole. The delay for the intersection corresponds to a LOS value which describes the intersection operations. Intersections with vehicular volumes which are at or near capacity, experience greater congestion and longer vehicle delays. **Table 1** describes the level of service concept and the operating conditions expected under each level of service for signalized and stop-controlled intersections.

Existing Traffic Operations Analysis

The morning and evening peak hour level of service analyses were conducted for the four study intersections based on the measured traffic volumes and the methodologies described previously. All intersection analyses are performed using the TRAFFIX (Traffic Impact Analysis) software program. The existing conditions level of service analysis results are summarized in **Table 2** for the weekend midday peak hour.

Level of service D is generally considered to be the lowest acceptable LOS in an urban or suburban area. Level of service E and F are considered to be unacceptable operating conditions which warrant mitigation. The results shown in **Table 2** indicate that all four of the analyzed intersections are currently operating at LOS D or better during the weekend midday peak hour. The detailed level of service worksheets are included in Appendix A.

TABLE 1
INTERSECTION LEVEL OF SERVICE DEFINITIONS

LOS	Interpretation	Signalized Intersection Volume to Capacity Ratio (ICU/CMA)	Stop-Controlled Intersection Average Stop Delay (HCM)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0.000 - 0.600	≤10 seconds
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	0.601 - 0.700	>10 and ≤15 sec
C	Good operation. Occasionally backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.701 - 0.800	>15 and ≤25 sec
D	Fair operation. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801 - 0.900	>25 and ≤35 sec
E	Poor operation. Some long standing vehicular queues develop on critical approaches.	0.901 - 1.000	>35 and ≤50 sec
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movements of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	Over 1.000	>50 seconds

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C., 2000.

TABLE 2
EXISTING WEEKEND MIDDAY PEAK HOUR LEVEL OF SERVICE SUMMARY

	Location	Weekend Peak Hour	Existing Conditions	
			V/C Ratio or Delay	LOS
1	San Fernando Road & Fletcher Drive	Midday	0.862	D
2	San Fernando Road & SR-2 Southbound Ramps	Midday	0.879	D
3	San Fernando Road & Division Street [a]	Midday	11.6	B
4	San Fernando Road & Ave 26	Midday	0.488	A

Note:

a. Intersection controlled by stop-sign. Value represents average vehicle delay in seconds.

FUTURE WITHOUT PROJECT CONDITIONS

To evaluate the potential impact of the proposed project on local traffic conditions, it is first necessary to develop a forecast of future traffic volumes in the study area under conditions without the proposed project. This provides a basis against which to measure the potential significant impacts of the proposed project.

The anticipated buildout year of the proposed project is expected to be 2006. The projection of Year 2006 No-Project (future without project) traffic consists of existing traffic plus ambient traffic growth (general background regional growth) plus growth in traffic generated by specific cumulative projects expected to be completed by the year 2006. The following describes the two growth components.

Ambient Traffic Growth

Ambient traffic growth is the traffic growth that will occur in the study area due to general employment growth, housing growth and growth in regional through trips in southern California. Even if there was no change in housing or employment in the City of Los Angeles, there will be some background (ambient) traffic growth in the region. Per the LADOT, a one percent per year growth rate was assumed as a conservative estimate of traffic increase in the study area. Existing 2004 traffic volumes were increased by a factor of 1.02 to account for ambient traffic growth to the year 2006.

Cumulative Project Growth

Cumulative project traffic growth which is growth due to specific, known development projects in the study area is also included in the analysis of the future without project conditions. Based on information obtained from the City of Los Angeles and previous studies conducted in the area, there were a total of nine projects identified which may affect traffic circulation within the study area. **Table 3** summarizes the location, size and type of land use for each of project. A figure showing the general locations of the related projects is included in Appendix B.

Traffic generated due to these projects has been estimated based on information from the LADOT, previous studies in the area, and supplemented with standard trip generation data from the Institute of Transportation Engineers' (ITE) *Trip Generation, 6th Edition.* The estimated trip generation for each of the nine cumulative projects is summarized in **Table 3**. As shown, the cumulative projects are forecast to generate a total of approximately 12,840 weekend daily trips of which approximately 2,065 trips would be expected during the weekend midday peak hour. These trips expected from the cumulative projects were then assigned to the traffic model as part of the development of the future no-project traffic projections. The weekend midday peak hour traffic volumes associated with these related projects are shown on **Figure 5**.

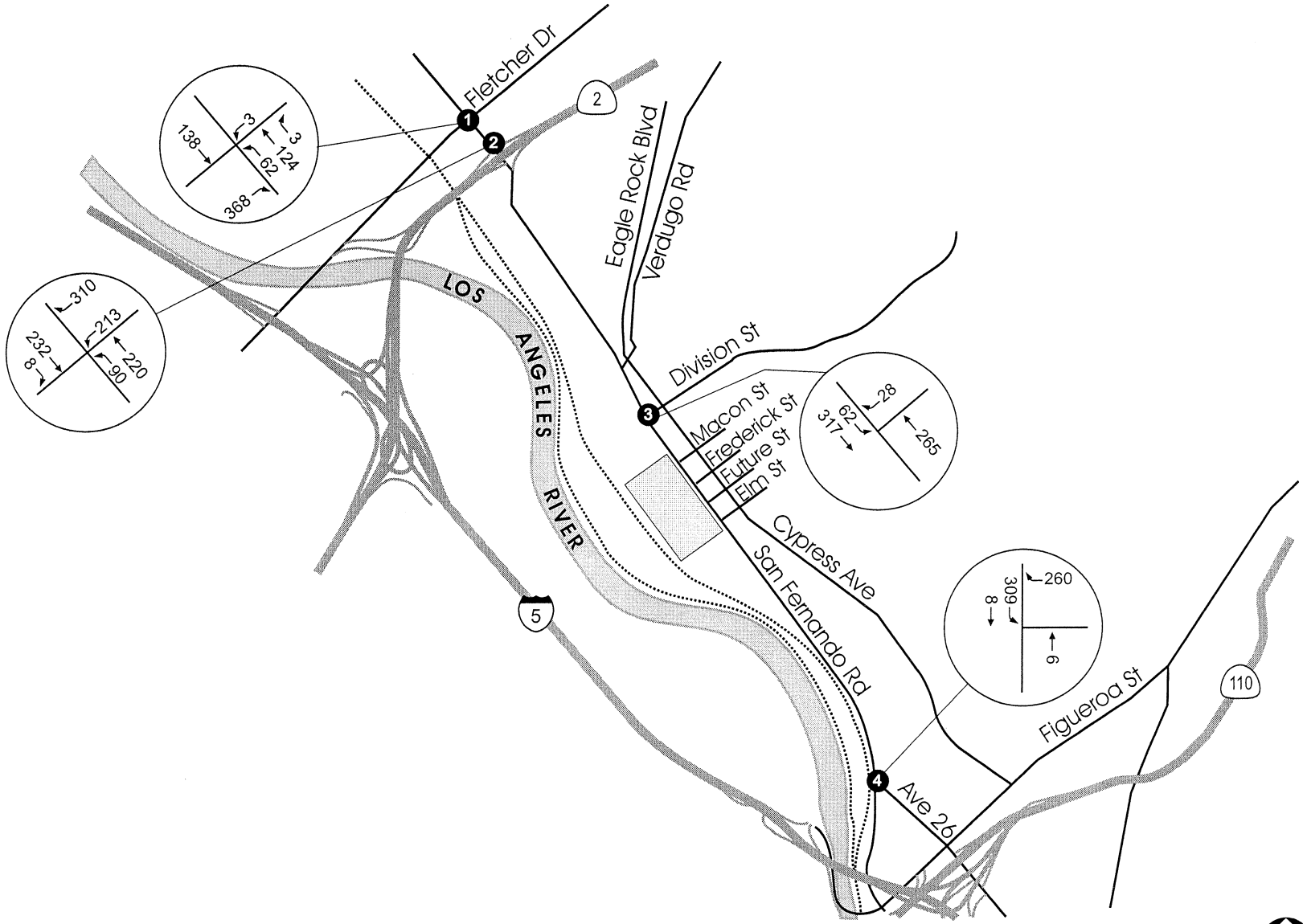
Future Without Project Traffic Analysis

The proposed Taylor Yard Park Development is anticipated to be complete by 2006, therefore future conditions without the project were assessed for this year. The no-project traffic projections were developed and operating conditions were analyzed at the four study intersections for the weekend midday peak hour, taking into account the addition of the background ambient growth and traffic related to the cumulative projects.

TABLE 3
CUMULATIVE PROJECTS - TRIP GENERATION ESTIMATES

Location	Land Use Description and Size	Saturday Daily	Weekend Peak Hour		
			In	Out	Total
4200 Figueroa St [a]	2,684sf commercial bldg to include 1,260sf car wash	134	58	58	116
	2,684sf commercial bldg	*134*	*7*	*6*	*13*
	1,260sf car wash	*N/A*	*52*	*52*	*103*
1316 Glendale Bl [a]	Renovating 21,026sf building as recreation center	191	13	13	26
1923 Micheltorena St [a]	45 rooms hotel	369	18	14	32
2838 Rowena Av [a]	Proposed restaurant & bar w/live entertainment	477	32	22	55
2930 Fletcher Dr [b]	LACC Satellite Campus and 24,000sf retail	1,199	62	57	119
	LACC Satellite Campus	*	*	*	*
	Retail 24,000 sf	*1,199*	*62*	*57*	*119*
Westerly of San Fernando Rd [c]	Industrial Park, 750,300sf	1,868	84	179	263
3880 San Rafael Ave [c]	Church, 207,800sf	2,016	500	176	675
570 Ave. 26 [c]	Home improvement superstore, 129,700sf	5,923	371	329	700
2646 Figueroa St [c]	Reception hall, 7,000sf	661	45	31	76
Total		**12,838**	**1,183**	**880**	**2,063**

Notes:
[a] Source: LADOT Data Base.
[b] Source: Los Angeles Community College Satellite Campus Project Final EIR Update. Impact Sciences, May 2001.
[c] Source: Related Project List from Traffic Impact Study for Proposed Industrial and Retail Development at Taylor Yard, Northeast Los Angeles. Crain & Associates, December 1999.
* Negligible trips on Saturday.



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Traffic Impact Study

FIGURE 5
Cumulative Projects Only
Weekend Midday Peak Hour Traffic Volumes

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Based on the forecast parameters discussed above, the morning and evening peak hour traffic volumes were developed for the year 2006 conditions. **Figure 6** illustrates the future without project weekend midday peak hour traffic volumes at the four study intersections. These volumes represent conditions with ambient traffic growth in addition to traffic associated with the related projects.

Based on the 2006 without project traffic forecast, the levels of service at the analyzed intersections were calculated for the weekend midday peak hour. **Table 4** summarizes the peak hour level of service results. As shown in **Table 4**, two of the four analyzed intersections are projected to operate at LOS E or F during the midday peak hour. These intersections are:

- San Fernando Road & Fletcher Drive (LOS E)
- San Fernando Road & SR-2 Southbound Ramps (LOS F)

The remaining study intersections are projected to operate at LOS B during the midday peak hour under future conditions without the project.

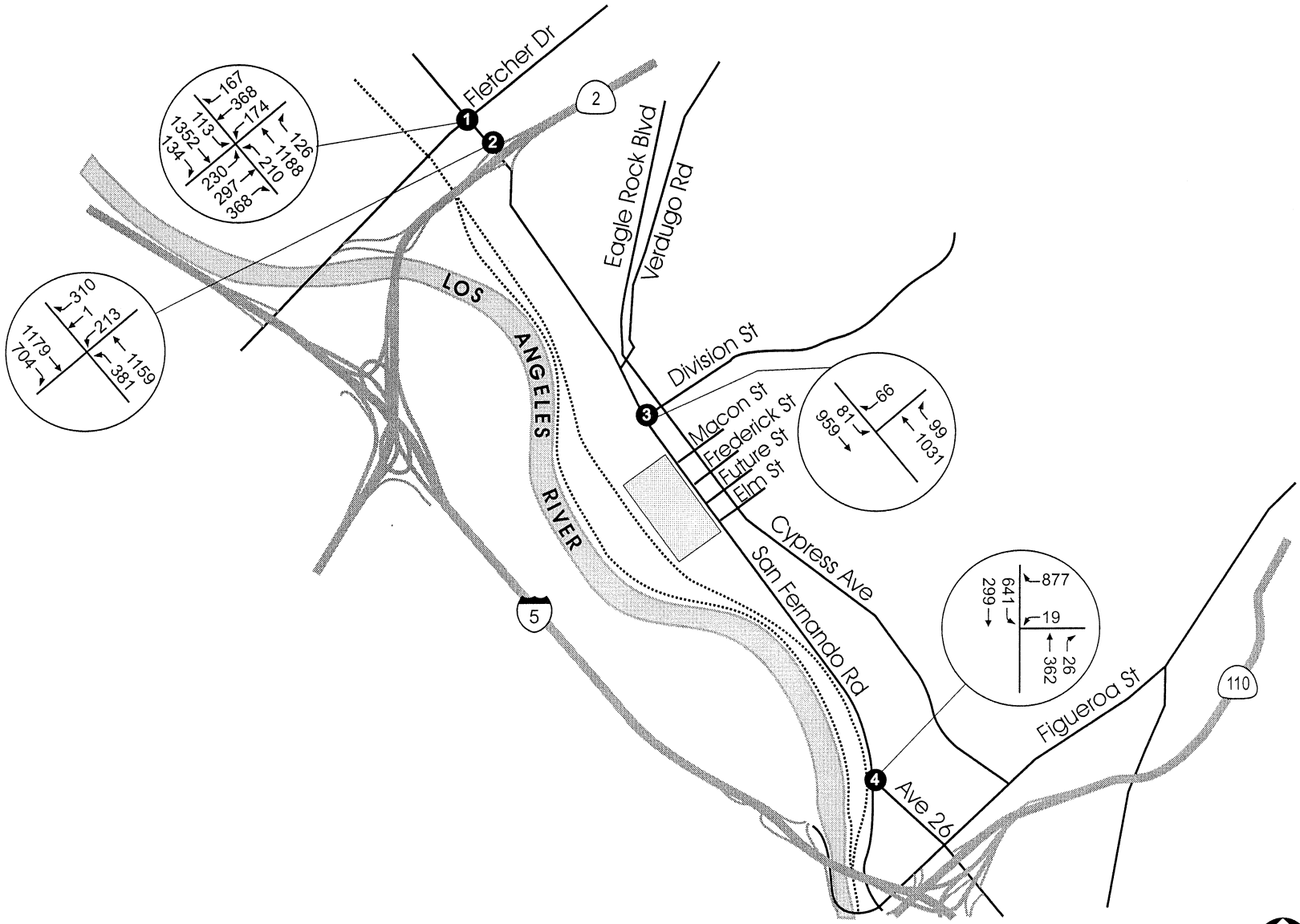

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FIGURE 6
FutureWithout Project
Weekend Midday Peak Hour Traffic Volumes

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TABLE 4
FUTURE WITHOUT PROJECT WEEKEND MIDDAY PEAK HOUR
LEVEL OF SERVICE SUMMARY

	Location	Weekend Peak Hour	Existing		Future w/o Project	
			V/C Ratio or Delay	LOS	V/C Ratio or Delay	LOS
1	San Fernando Road & Fletcher Drive	Midday	0.862	D	0.997	E
2	San Fernando Road & SR-2 Southbound Ramps	Midday	0.879	D	1.063	F
3	San Fernando Road & Division Street [a]	Midday	11.6	B	13.8	B
4	San Fernando Road & Ave 26	Midday	0.488	A	0.693	B

Note:
a. Intersection controlled by stop-sign. Value represents average vehicle delay in seconds.

FUTURE WITH PROJECT CONDITIONS

Project Trip Generation

The first step in analyzing the future traffic conditions with the project is to estimate the number of new trips expected to be generated by the proposed project. This section of the report describes the estimation of future traffic generation of the proposed project.

As described previously, the proposed project would consist of a 40-acre park development. Utilizing trip generation rate data contained in the ITE *Trip Generation, 6th Edition*, the estimated trips for the proposed project were calculated for the weekend. As noted earlier, the weekend midday time period is when the project is expected to generate the greatest number of trips. The resulting trip generation estimates are summarized in **Table 5**. As shown, the proposed park is expected to generate a total of approximately 486 weekend daily trips of which approximately 145 trips are expected to occur during the midday peak hour.

Project Trip Distribution and Assignment

The next step in the forecast of project traffic is the anticipated distribution of the trip estimates. The trip distribution assumptions are used to determine the origin and destination of the new vehicle trips associated with the project. The geographic distribution of the project trips is based on the locations of neighborhoods and residential areas, the street system that serves the site, and recent traffic data collected in the project study area. Based on these factors a distribution pattern was developed for the project and is shown on **Figure 7**. Utilizing the project trip generation and the trip distribution pattern, the project only traffic volumes were assigned to the street network. **Figure 8** illustrates the resulting project only weekend midday peak hour traffic volumes at the analyzed intersections.

Future With Project Traffic Analysis

The project only peak hour traffic volumes shown on **Figure 9** were then added to the future without project traffic volumes. The resulting year 2006 future with project weekend midday peak hour traffic volumes are shown on **Figure 9**.

Threshold of Significance

Per CEQA, any significant project related impacts are required to be identified in the environmental document. Significant traffic impacts are determined based on threshold of significance set by respective agencies. The City of Los Angeles Department of Transportation (LADOT) has established threshold criteria, which are used to determine if a project has a significant traffic impact. Using the LADOT standard, a project impact would be considered significant if the following conditions are met:

Intersection Condition With Project Traffic		Project-Related Increase in V/C Ratio
LOS	V/C Ratio	
C	0.701-0.800	equal to or greater than 0.040
D	0.801-0.900	equal to or greater than 0.020
E,F	>0.900	equal to or greater than 0.010

TABLE 5
TAYLOR YARD PARK
WEEKEND TRIP GENERATION ESTIMATES

Description	Size	Daily	WEEKEND PEAK HOUR		
			In	Out	Total
Taylor Yard Park	40 acres	486	68	76	144

ITE County Park (Land Use #412) rates used. Saturday daily rate and Sunday peak hour of generator.

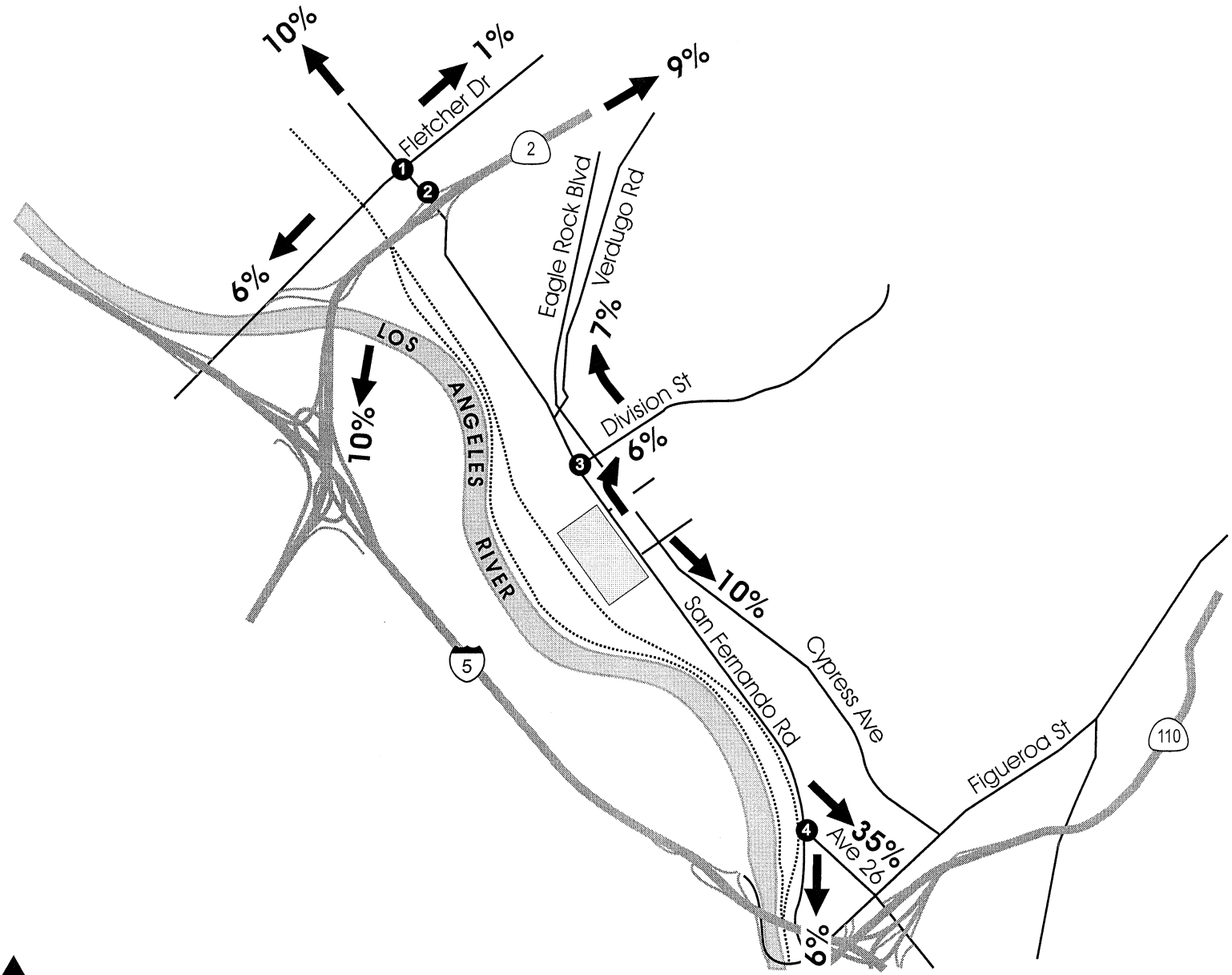

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FIGURE 7
Project Trip Distribution Pattern

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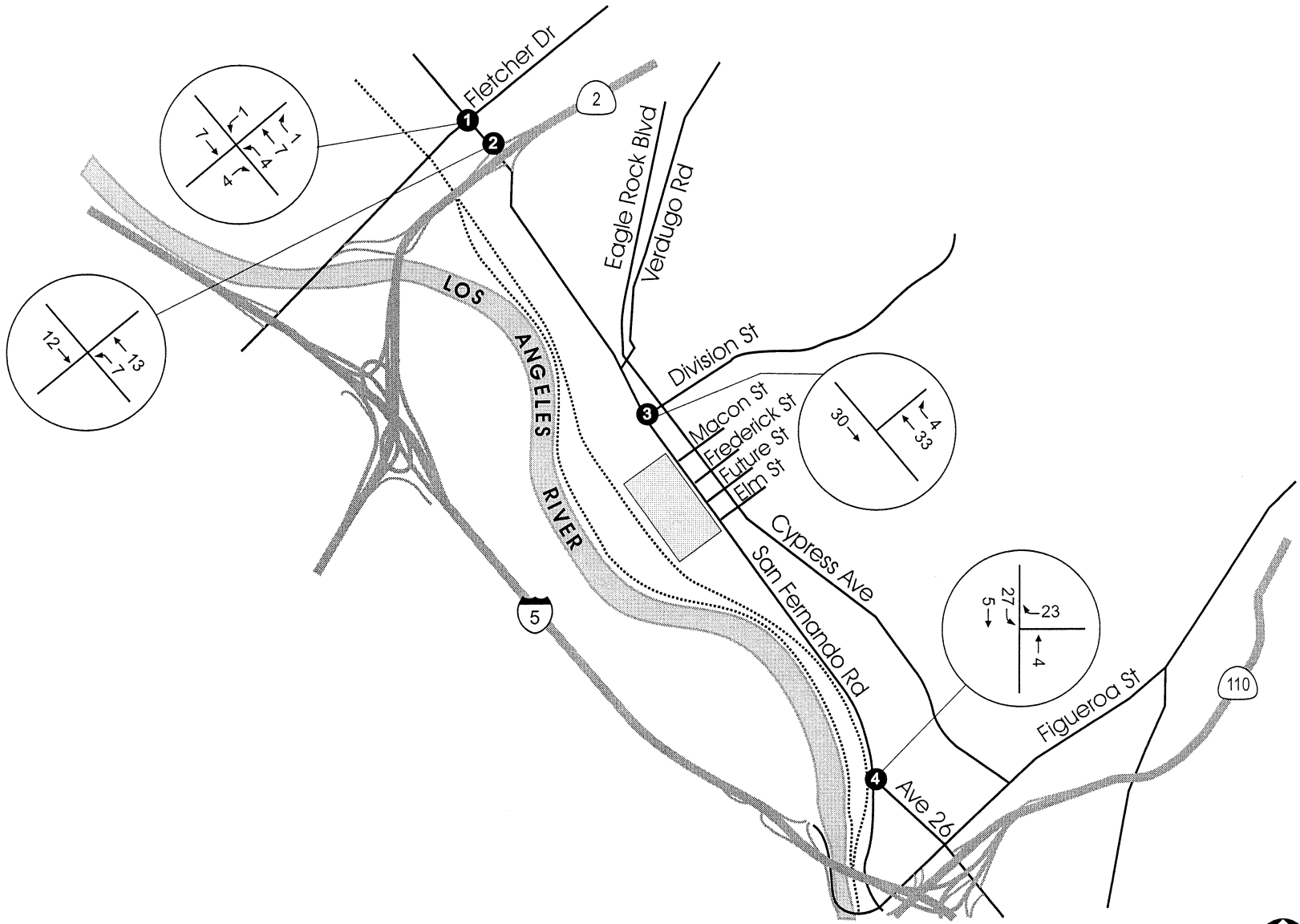

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FIGURE 8
Project Only
Weekend Midday Peak Hour Traffic Volumes

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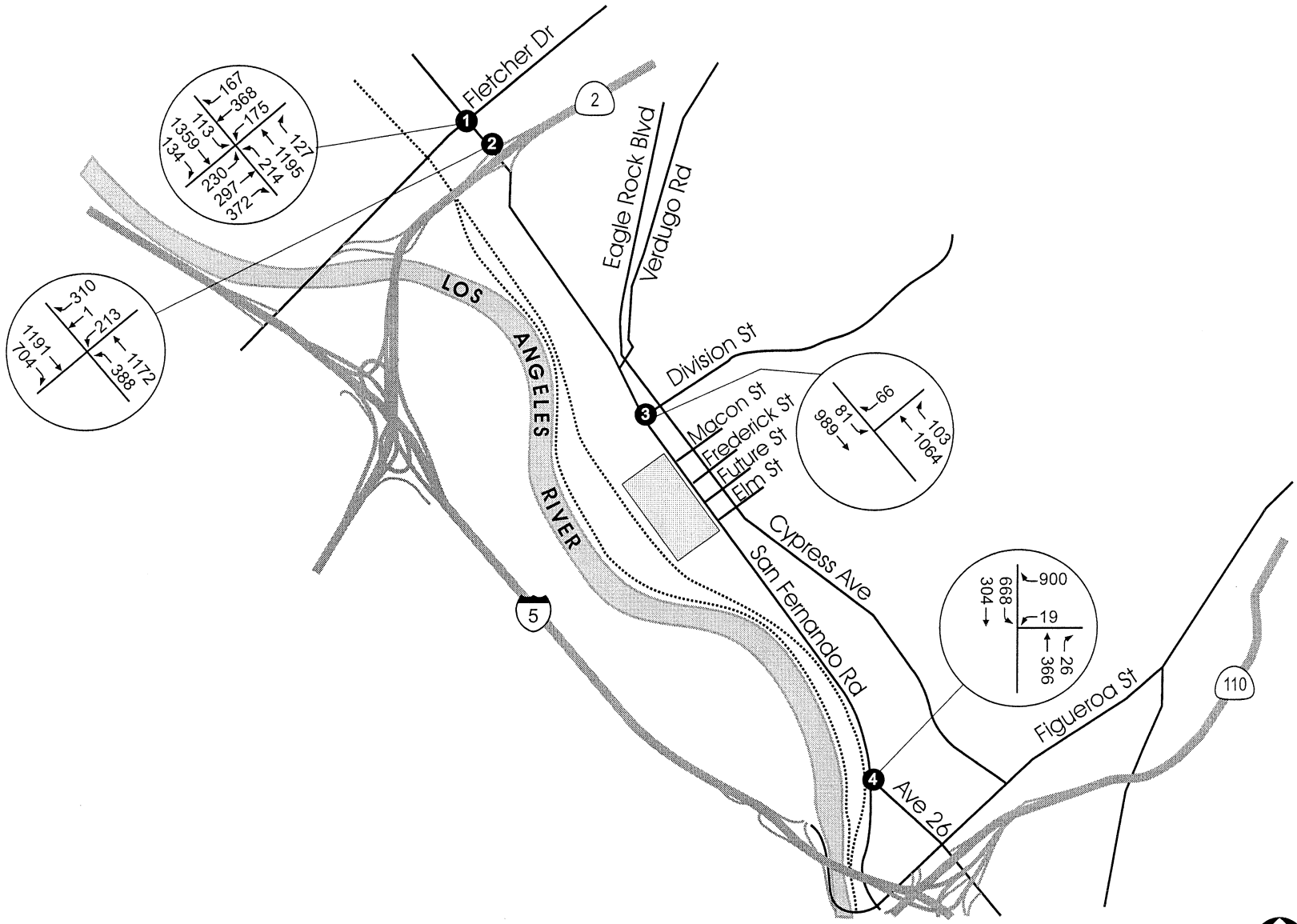

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FIGURE 9
Future With Project
Weekend Midday Peak Hour Traffic Volumes

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The City's criteria were applied to determine potential significant traffic impacts associated with the project at the four study locations.

Future with Project Analysis

The intersection volume-to-capacity ratios and corresponding levels of service for future with project were calculated and the results summarized in **Table 6** for each of the four analyzed locations. The resultant change in V/C ratio comparing the "Future With Project" to the "Future Without Project" is also presented in the table.

Based on the City of Los Angeles' thresholds of significance, the future with project forecasts indicate that the proposed project would not create a significant traffic impacts at any of the four analyzed intersections during the weekday midday peak hour.

Site Access Analysis

As currently proposed the project would provide two access points along San Fernando Road. The northernmost project driveway would align with Macon Street while the other would align with Future Street. These two project access points were also assessed for weekend midday peak hour. Based on the future with project peak hour traffic volumes, both project access points are expected to operate at LOS A during the weekend midday peak hour. Each of the access points would be controlled by a traffic signal with left-turn lanes provided along San Fernando Road. The detailed level of service worksheets which included the future with project midday peak hour traffic volumes for the two project access points are provided in Attachment A.

On-site Parking

The Taylor Yard Park development proposes to provide a total of 361 parking space on-site. As shown on the conceptual site plan, the majority of the parking would be located toward the northern end of the park. Based on the project trip generation estimates for the weekend, shown previously on **Table 5**, a total of 486 daily trips (243 in and 243 out) are expected. If all the inbound trips (243 vehicles) came and stayed during one period, the 361 spaces would be more than adequate to meet the demand. Therefore, it is anticipated that the 361-parking space supply would be adequate to serve the parking needs of the Taylor Yard Park development on site.

Construction Impacts

It is anticipated that there will be short-term adverse traffic impacts, particularly along San Fernando Road during the streetscape phase of the proposed project. In order to keep the construction impacts to a minimum, a construction staging and traffic plan would be provided to the City of Los Angeles for review and approval. To the degree possible, staging of construction equipment and construction employee parking should be off-street, thus limiting the impact along San Fernando Road and other surrounding streets. Additionally, San Fernando Road should maintain two-way traffic (i.e., at least one lane in each direction) during the construction phase. Should lane closures be required in order to accommodate construction activities, these closures should occur outside of the standard peak periods of street traffic. Also, access to local businesses should be maintained during the construction period. The plan would include but is not limited to, hours of construction (limit to off peak hours), identification of haul routes, potential for off-site parking/staging areas, and shuttle bus to transport workers to/from remote parking area.

TABLE 6
FUTURE WITH PROJECT WEEKEND MIDDAY PEAK HOUR
LEVEL OF SERVICE SUMMARY

Location	Weekend Peak Hour	Existing		Future w/o Project		Future w/ Project		Change in V/C	Significant Impact
		V/C Ratio or Delay	LOS	V/C Ratio or Delay	LOS	V/C Ratio or Delay	LOS		
1 San Fernando Road & Fletcher Drive	Midday	0.862	D	0.997	E	1.005	F	0.008	No
2 San Fernando Road & SR-2 Southbound Ramps	Midday	0.879	D	1.063	F	1.071	F	0.008	No
3 San Fernando Road & Division Street [a]	Midday	11.6	B	13.8	B	14.1	B	NA	No
4 San Fernando Road & Ave 26	Midday	0.488	A	0.693	B	0.711	C	0.018	No

Note:
a. Intersection controlled by stop-sign. Value represents average vehicle delay in seconds.

APPENDIX A

LEVEL OF SERVICE WORKSHEETS

EXISTING CONDITIONS

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Taylor Yard Park Development
Traffic Study
2004 Mid-day

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #1 San Fernando Rd / Fletcher Dr

Cycle (sec): 100 Critical Vol./Cap. (X): 0.862
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 104 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Permitted						Permitted					
Rights:	Include						Include						Include						Include					
Min. Green:	0		0		0		0		0		0		0		0		0		0		0		0	
Lanes:	1	0	1	1	0		1	0	1	1	0		1	0	1	1	0		1	0	1	1	0	
Volume Module:																								
Base Vol:	145	1043		121			111	1190		131			225		291		285		168		361		164	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	145	1043		121			111	1190		131			225		291		285		168		361		164	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	145	1043		121			111	1190		131			225		291		285		168		361		164	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
Reduced Vol:	145	1043		121			111	1190		131			225		291		285		168		361		164	
PCE Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol.:	145	1043		121			111	1190		131			225		291		285		168		361		164	
Saturation Flow Module:																								
Sat/Lane:	1500	1500		1500			1500	1500		1500			1500		1500		1500		1500		1500		1500	
Adjustment:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Lanes:	1.00	1.79		0.21			1.00	1.80		0.20			1.00		1.01		0.99		1.00		1.38		0.62	
Final Sat.:	1500	2688		312			1500	2702		298			1500		1516		1484		1500		2063		937	
Capacity Analysis Module:																								
Vol/Sat:	0.10	0.39		0.39			0.07	0.44		0.44			0.15		0.19		0.19		0.11		0.18		0.17	
Crit Vol:	145							660					225								263			
Crit Moves:	****							****					****								****			

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Taylor Yard Park Development
Traffic Study
2004 Mid-day

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #2 San Fernando Rd / SR-2 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.879
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 154 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Permitted						Permitted					
Rights:	Include						Include						Include						Include					
Min. Green:	0		0		0		0		0		0		0		0		0		0		0		0	
Lanes:	1	0	2	0	0		0	0	1	1	0		0	0	0	0	0		1	0	1!	0	1	
Volume Module:																								
Base Vol:	285	940		0			0	928		682			0		0		0		152		1		290	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	285	940		0			0	928		682			0		0		0		152		1		290	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	285	940		0			0	928		682			0		0		0		152		1		290	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
Reduced Vol:	285	940		0			0	928		682			0		0		0		152		1		290	
PCE Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.10		1.00		1.10	
Final Vol.:	285	940		0			0	928		682			0		0		0		167		1		319	
Saturation Flow Module:																								
Sat/Lane:	1425	1425		1425			1425	1425		1425			1425		1425		1425		1425		1425		1425	
Adjustment:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Lanes:	1.00	2.00		0.00			0.00	1.15		0.85			0.00		0.00		0.00		1.03		0.01		1.96	
Final Sat.:	1425	2850		0			0	1643		1207			0		0		0		1467		9		2799	
Capacity Analysis Module:																								
Vol/Sat:	0.20	0.33		0.00			0.00	0.56		0.56			0.00		0.00		0.00		0.11		0.11		0.11	
Crit Vol:	285							805							0				162					
Crit Moves:	****							****											****					

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Taylor Yard Park Development
Traffic Study
2004 Mid-day

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 San Fernando Rd / Division St

Average Delay (sec/veh): 11.6 Worst Case Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	1 0	0	1	1	0 0	0	0	0	0 0	0	0	0	0 1
Volume Module:																
Base Vol:	0	751		97	19	629		0	0		0	0	0		0	37
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	0	751		97	19	629		0	0		0	0	0		0	37
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Volume:	0	751		97	19	629		0	0		0	0	0		0	37
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol.:	0	751		97	19	629		0	0		0	0	0		0	37
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	4.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		6.9
FollowUpTim:	xxxxx	xxxx		xxxxx	2.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		3.3
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	848	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		424
Potent Cap.:	xxxx	xxxx		xxxxx	798	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		584
Move Cap.:	xxxx	xxxx		xxxxx	798	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		584
Level Of Service Module:																
Stopped Del:	xxxxx	xxxx		xxxxx	9.5	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		11.6
LOS by Move:	*	*		*	A	*		*	*	*		*	*	*		B
Movement:	LT -	LTR	-	RT	LT -	LTR	-	RT	LT -	LTR	-	RT	LT -	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	9.6	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	A	*		*	*	*		*	*	*		*
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				11.6			
ApproachLOS:	*				*				*				B			

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Taylor Yard Park Development
Traffic Study
2004 Mid-day

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #4 San Fernando Rd / Ave 26

Cycle (sec): 100 Critical Vol./Cap. (X): ~~0.364~~ 0.488
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Ignore				Include				Include				Ovl			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	0	0	2	0 1	1	0	2	0 0	0	0	0	0 0	1	0	0	0 2
Volume Module:																
Base Vol:	0	349		25	325	285		0	0		0	0	19		0	605
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	0	349		25	325	285		0	0		0	0	19		0	605
User Adj:	1.00	1.00		0.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00		0.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Volume:	0	349		0	325	285		0	0		0	0	19		0	605
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	0	349		0	325	285		0	0		0	0	19		0	605
PCE Adj:	1.00	1.00		0.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		0.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.10
Final Vol.:	0	349		0	325	285		0	0		0	0	19		0	666
Saturation Flow Module:																
Sat/Lane:	1425	1425		1425	1425	1425		1425	1425		1425	1425	1425		1425	1425
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Lanes:	0.00	2.00		1.00	1.00	2.00		0.00	0.00		0.00	0.00	1.00		0.00	2.00
Final Sat.:	0	2850		1425	1425	2850		0	0		0	0	1425		0	2850
Capacity Analysis Module:																
Vol/Sat:	0.00	0.12		0.00	0.23	0.10		0.00	0.00		0.00	0.00	0.01		0.00	0.23
Crit Vol:		175			325							0	~~19~~			196
Crit Moves:		****			****								****			

RTOR
605
-325
280
Dual Lts 70%
196

NBT 175
SBL 325
WBR 196
696 / 1425 = 0.488 A

FUTURE WITHOUT PROJECT

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Taylor Yard Park Development
Traffic Impact Study
2006 Mid-day without Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 San Fernando Rd / Fletcher Dr	D	xxxxx	0.880	E	xxxxx	0.997	+ 0.117 V/C
# 2 San Fernando Rd / SR-2 SB Ramp	D	xxxxx	0.897	F	xxxxx	1.063	+ 0.166 V/C
# 3 San Fernando Rd / Division St	B	11.7	0.000	B	13.8	0.000	+ 0.000 V/C
# 4 San Fernando Rd / Ave 26	A	xxxxx	0.371	A	xxxxx	0.590	+ 0.219 V/C

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Taylor Yard Park Development
Traffic Impact Study
2006 Mid-day without Project

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 San Fernando Rd / Fletcher Dr

Cycle (sec): 100 Critical Vol./Cap. (X): 0.997
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	145	1043	121		111	1190	131		225	291	285		168	361	164	
Growth Adj:	1.02	1.02	1.02		1.02	1.02	1.02		1.02	1.02	1.02		1.02	1.02	1.02	
Initial Bse:	148	1064	123		113	1214	134		230	297	291		171	368	167	
Added Vol:	62	124	3		0	138	0		0	0	77		3	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	210	1188	126		113	1352	134		230	297	368		174	368	167	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	210	1188	126		113	1352	134		230	297	368		174	368	167	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	210	1188	126		113	1352	134		230	297	368		174	368	167	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	210	1188	126		113	1352	134		230	297	368		174	368	167	
Saturation Flow Module:																
Sat/Lane:	1500	1500	1500		1500	1500	1500		1500	1500	1500		1500	1500	1500	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.81	0.19		1.00	1.82	0.18		1.00	1.00	1.00		1.00	1.38	0.62	
Final Sat.:	1500	2712	288		1500	2729	271		1500	1500	1500		1500	2064	936	
Capacity Analysis Module:																
Vol/Sat:	0.14	0.44	0.44		0.08	0.50	0.50		0.15	0.20	0.25		0.12	0.18	0.18	
Crit Vol:	210					743					368		174			
Crit Moves:	****					****					****		****			

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Taylor Yard Park Development
Traffic Impact Study
2006 Mid-day without Project

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #2 San Fernando Rd / SR-2 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 1.063
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	2	0 0	0	0	1	1 0	0	0	0	0 0	1	0	1!	0 1
Volume Module:																
Base Vol:	285	940	0		0	928	682		0	0	0		152	1	290	
Growth Adj:	1.02	1.02	1.02		1.02	1.02	1.02		1.02	1.02	1.02		1.02	1.02	1.02	
Initial Bse:	291	959	0		0	947	696		0	0	0		155	1	296	
Added Vol:	90	200	0		0	232	8		0	0	0		58	0	14	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	381	1159	0		0	1179	704		0	0	0		213	1	310	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	381	1159	0		0	1179	704		0	0	0		213	1	310	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	381	1159	0		0	1179	704		0	0	0		213	1	310	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.10	1.00	1.10	
Final Vol.:	381	1159	0		0	1179	704		0	0	0		234	1	341	
Saturation Flow Module:																
Sat/Lane:	1425	1425	1425		1425	1425	1425		1425	1425	1425		1425	1425	1425	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	0.00		0.00	1.25	0.75		0.00	0.00	0.00		1.22	0.01	1.77	
Final Sat.:	1425	2850	0		0	1784	1066		0	0	0		1737	7	2531	
Capacity Analysis Module:																
Vol/Sat:	0.27	0.41	0.00		0.00	0.66	0.66		0.00	0.00	0.00		0.13	0.13	0.13	
Crit Vol:	381					941				0			192			
Crit Moves:	****					****							****			

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Taylor Yard Park Development
Traffic Impact Study
2006 Mid-day without Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 San Fernando Rd / Division St

Average Delay (sec/veh): 13.8 Worst Case Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	1 0	0	1	1	0 0	0	0	0	0 0	0	0	0	0 1
Volume Module:																
Base Vol:	0	751	97		19	629	0		0	0	0		0	0	37	
Growth Adj:	1.02	1.02	1.02		1.02	1.02	1.02		1.02	1.02	1.02		1.02	1.02	1.02	
Initial Bse:	0	766	99		19	642	0		0	0	0		0	0	38	
Added Vol:	0	265	0		62	317	0		0	0	0		0	0	28	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	1031	99		81	959	0		0	0	0		0	0	66	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	1031	99		81	959	0		0	0	0		0	0	66	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	0	1031	99		81	959	0		0	0	0		0	0	66	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	6.9	
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	3.3	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		1130	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	565	
Potent Cap.:	xxxx	xxxx	xxxxx		626	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	473	
Move Cap.:	xxxx	xxxx	xxxxx		626	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	473	
Level Of Service Module:																
Stopped Del:	xxxxx	xxxx	xxxxx		10.8	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	13.8	
LOS by Move:	*	*	*		B	*	*		*	*	*		*	*	B	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		11.6	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		B	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				13.8			
ApproachLOS:	*				*				*				B			

2006 Mid-day without ProjecThu Jan 22, 2004 16:52:21 Page 9-1

Taylor Yard Park Development
Traffic Impact Study
2006 Mid-day without Project

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #4 San Fernando Rd / Ave 26

Cycle (sec): 100 Critical Vol./Cap. (X): ~~0.590~~ 0.693
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: ~~A~~ B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Ignore			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	2	0 1	1 0	2	0 0	0 0	0	0 0	1 0	0	0 2
Volume Module:												
Base Vol:	0	349	25	325	285	0	0	0	0	19	0	605
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	356	25	332	291	0	0	0	0	19	0	617
Added Vol:	0	6	0	309	8	0	0	0	0	0	0	260
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	362	25	641	299	0	0	0	0	19	0	877
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	362	0	641	299	0	0	0	0	19	0	877
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	362	0	641	299	0	0	0	0	19	0	877
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10
Final Vol.:	0	362	0	641	299	0	0	0	0	19	0	965
Saturation Flow Module:												
Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00
Final Sat.:	0	2850	1425	1425	2850	0	0	0	0	1425	0	2850
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.00	0.45	0.10	0.00	0.00	0.00	0.00	0.01	0.00	0.34
Crit Vol:		181		641				0		~~19~~		165
Crit Moves:		****		****						****		

RTOR
877
-641
236
DUAL RTS 70%
165

NBT 181
SBL 641
WBR 165
987/1425 = 0.693 B

FUTURE WITH PROJECT

2006 Mid-day with Project Mon Jan 26, 2004 10:12:48 Page 5-1

Taylor Yard Park Developement
Traffic Impact Study
2006 Mid-day with Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Del/ Veh	V/ C	Future LOS	Del/ Veh	V/ C	Change in
# 1 San Fernando Rd / Fletcher Dr	D	xxxxx	0.879	F	xxxxx	1.005	+ 0.126 V/C
# 2 San Fernando Rd / SR-2 SB Ramp	D	xxxxx	0.896	F	xxxxx	1.071	+ 0.175 V/C
# 3 San Fernando Rd / Division St	B	11.7	0.000	B	14.1	0.000	+ 0.000 V/C
# 4 San Fernando Rd / Ave 26	A	xxxxx	0.371	B	xxxxx	0.610	+ 0.239 V/C

2006 Mid-day with Project Mon Jan 26, 2004 10:12:48 Page 6-1

Taylor Yard Park Developement
Traffic Impact Study
2006 Mid-day with Project

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 San Fernando Rd / Fletcher Dr

Cycle (sec): 100 Critical Vol./Cap. (X): 1.005
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	145	1043	121	111	1190	131	225	291	285	168	361	164
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	148	1064	123	113	1214	134	230	297	291	171	368	167
Added Vol:	66	131	4	0	145	0	0	0	81	4	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	214	1195	127	113	1359	134	230	297	372	175	368	167
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	214	1195	127	113	1359	134	230	297	372	175	368	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	214	1195	127	113	1359	134	230	297	372	175	368	167
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	214	1195	127	113	1359	134	230	297	372	175	368	167
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.82	0.18	1.00	1.00	1.00	1.00	1.38	0.62
Final Sat.:	1500	2711	289	1500	2731	269	1500	1500	1500	1500	2063	937
Capacity Analysis Module:												
Vol/Sat:	0.14	0.44	0.44	0.08	0.50	0.50	0.15	0.20	0.25	0.12	0.18	0.18
Crit Vol:	214				746				372	175		
Crit Moves:	****				****				****	****		

2006 Mid-day with Project Mon Jan 26, 2004 10:12:48 Page 7-1

Taylor Yard Park Developement
Traffic Impact Study
2006 Mid-day with Project

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #2 San Fernando Rd / SR-2 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 1.071
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Permitted						Permitted					
Rights:	Include						Include						Include						Include					
Min. Green:	0		0		0		0		0		0		0		0		0		0		0		0	
Lanes:	1	0	2	0	0		0	0	1	1	0		0	0	0	0	0		1	0	1!	0	1	
Volume Module:																								
Base Vol:	285		940		0		0		928		682		0		0		0		152		1		290	
Growth Adj:	1.02		1.02		1.02		1.02		1.02		1.02		1.02		1.02		1.02		1.02		1.02		1.02	
Initial Bse:	291		959		0		0		947		696		0		0		0		155		1		296	
Added Vol:	97		213		0		0		244		8		0		0		0		58		0		14	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	388		1172		0		0		1191		704		0		0		0		213		1		310	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	388		1172		0		0		1191		704		0		0		0		213		1		310	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	388		1172		0		0		1191		704		0		0		0		213		1		310	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.10		1.00		1.10	
Final Vol.:	388		1172		0		0		1191		704		0		0		0		234		1		341	
Saturation Flow Module:																								
Sat/Lane:	1425		1425		1425		1425		1425		1425		1425		1425		1425		1425		1425		1425	
Adjustment:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Lanes:	1.00		2.00		0.00		0.00		1.26		0.74		0.00		0.00		0.00		1.22		0.01		1.77	
Final Sat.:	1425		2850		0		0		1791		1059		0		0		0		1739		8		2529	
Capacity Analysis Module:																								
Vol/Sat:	0.27		0.41		0.00		0.00		0.66		0.66		0.00		0.00		0.00		0.13		0.13		0.13	
Crit Vol:	388								947						0				192					
Crit Moves:	****								****										****					

2006 Mid-day with Project Mon Jan 26, 2004 10:12:48 Page 8-1

Taylor Yard Park Developement
Traffic Impact Study
2006 Mid-day with Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 San Fernando Rd / Division St

Average Delay (sec/veh): 14.1 Worst Case Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	1	0		0	1	1	0	0		0	0	0	0	0		0	0	0	0	1	
Volume Module:																								
Base Vol:	0	751		97			19	629		0			0	0		0			0	0		37		
Growth Adj:	1.02	1.02		1.02			1.02	1.02		1.02			1.02	1.02		1.02			1.02	1.02		1.02		
Initial Bse:	0	766		99			19	642		0			0	0		0			0	0		38		
Added Vol:	0	298		4			62	347		0			0	0		0			0	0		28		
PasserByVol:	0	0		0			0	0		0			0	0		0			0	0		0		
Initial Fut:	0	1064		103			81	989		0			0	0		0			0	0		66		
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Volume:	0	1064		103			81	989		0			0	0		0			0	0		66		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Final Vol.:	0	1064		103			81	989		0			0	0		0			0	0		66		
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx			4.1	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		6.9		
FollowUpTim:	xxxxx	xxxx		xxxxx			2.2	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		3.3		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx			1167	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		583		
Potent Cap.:	xxxx	xxxx		xxxxx			606	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		460		
Move Cap.:	xxxx	xxxx		xxxxx			606	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		460		
Level Of Service Module:																								
Stopped Del:	xxxxx	xxxx		xxxxx			10.9	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		14.1		
LOS by Move:	*	*		*			B	*		*			*	*		*			*	*		B		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx		
Shrd StpDel:	xxxxx	xxxx		xxxxx			11.9	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*	*		*			B	*		*			*	*		*			*	*		*		
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						14.1					
ApproachLOS:	*						*						*						B					

2006 Mid-day with Project Mon Jan 26, 2004 10:12:48 Page 9-1

Taylor Yard Park Developement
Traffic Impact Study
2006 Mid-day with Project

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #4 San Fernando Rd / Ave 26

Cycle (sec): 100 Critical Vol./Cap. (X): ~~0.610~~ 0.711
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level Of Service: ~~D~~ C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Ignore			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	2	0 1	1 0	2	0 0	0 0	0	0 0	1 0	0	0 2
Volume Module:												
Base Vol:	0	349	25	325	285	0	0	0	0	19	0	605
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	356	25	332	291	0	0	0	0	19	0	617
Added Vol:	0	10	0	336	13	0	0	0	0	0	0	283
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	366	25	668	304	0	0	0	0	19	0	900
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	366	0	668	304	0	0	0	0	19	0	900
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	366	0	668	304	0	0	0	0	19	0	900
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10
Final Vol.:	0	366	0	668	304	0	0	0	0	19	0	990
Saturation Flow Module:												
Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00
Final Sat.:	0	2850	1425	1425	2850	0	0	0	0	1425	0	2850
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.00	0.47	0.11	0.00	0.00	0.00	0.00	0.01	0.00	0.35
Crit Vol:		183		668				0		~~19~~		162
Crit Moves:		****		****						****		

2 TO 12
900
- 668
232
Dual Rts 70%
162

NBT 183
SBL 668
WBR 162
1013 / 1425 0.711 C

FUTURE WITH PROJECT
SITE ACCESS POINTS

Taylor Yard Park Development
Traffic Study
2006 Site Access

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #5 San Fernando Rd / Macon St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.450
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	30	4	15	20	6	20	20	964	25	7	1137	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	4	15	20	6	20	20	964	25	7	1137	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	4	15	20	6	20	20	964	25	7	1137	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	4	15	20	6	20	20	964	25	7	1137	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	30	4	15	20	6	20	20	964	25	7	1137	20
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.21	0.79	0.44	0.13	0.43	1.00	1.95	0.05	1.00	1.97	0.03
Final Sat.:	1500	316	1184	652	196	652	1500	2924	76	1500	2948	52
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.01	0.03	0.03	0.03	0.01	0.33	0.33	0.00	0.39	0.39
Crit Vol:	30			46			20			578		
Crit Moves:	****			****			****			****		

Taylor Yard Park Development
Traffic Study
2006 Site Access

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

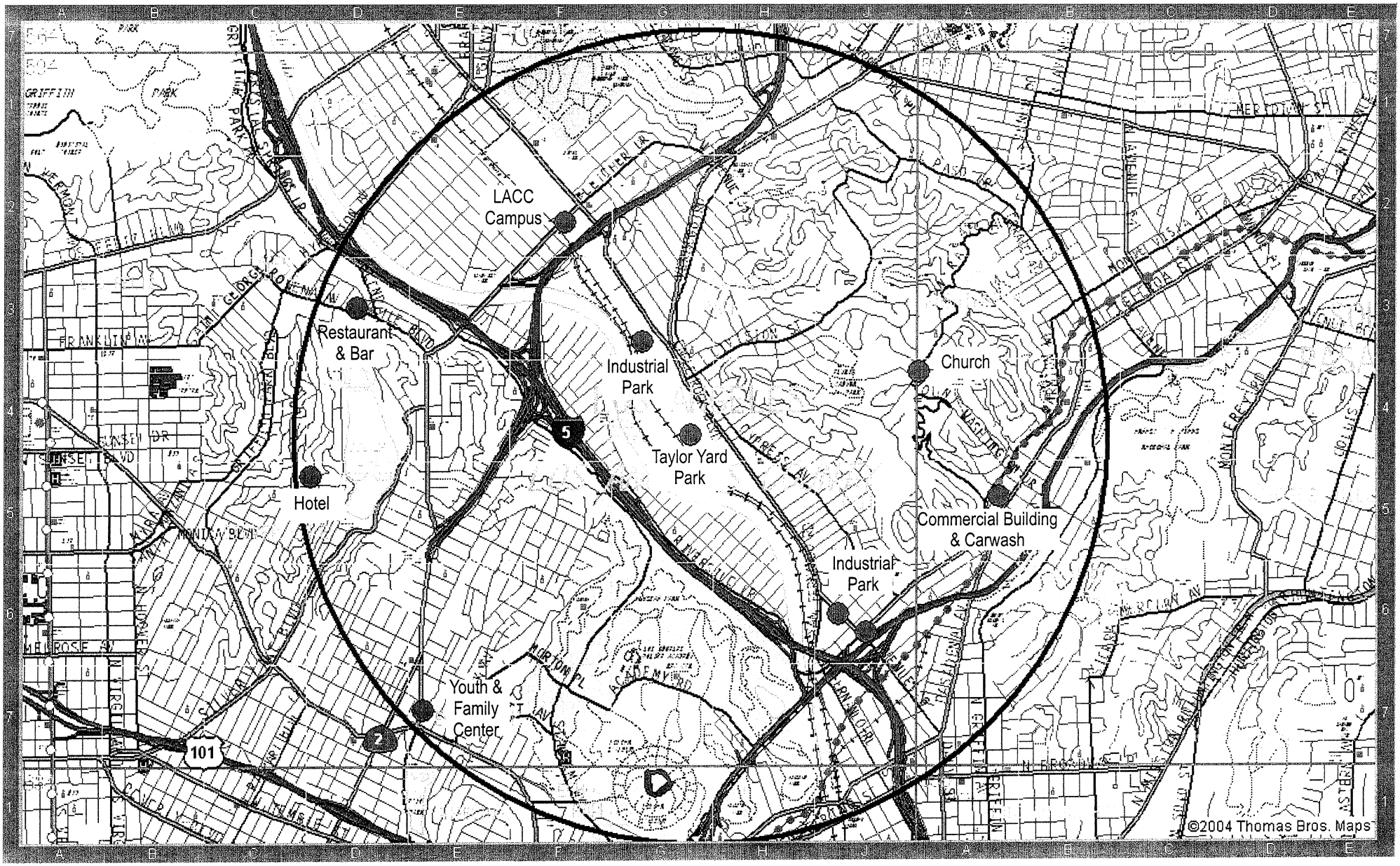
Intersection #6 San Fernando Rd / Future St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.426
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	7	3	17	20	5	20	20	974	5	20	1137	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	3	17	20	5	20	20	974	5	20	1137	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	3	17	20	5	20	20	974	5	20	1137	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	3	17	20	5	20	20	974	5	20	1137	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	7	3	17	20	5	20	20	974	5	20	1137	20
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.15	0.85	1.00	0.20	0.80	1.00	1.99	0.01	1.00	1.97	0.03
Final Sat.:	1500	225	1275	1500	300	1200	1500	2985	15	1500	2948	52
Capacity Analysis Module:												
Vol/Sat:	0.00	0.01	0.01	0.01	0.02	0.02	0.01	0.33	0.33	0.01	0.39	0.39
Crit Vol:		20			20			20			578	
Crit Moves:		****			****			****			****	

APPENDIX B

LOCATIONS OF CUMULATIVE PROJECTS


LACC Campus
Restaurant & Bar
Industrial Park
Church
Taylor Yard Park
Hotel
Commercial Building & Carwash
Industrial Park
Youth & Family Center
101
5
2
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